

## COLLEGE OF ARTS AND SCIENCES

### PROGRAM OF STUDY

#### Introduction

The College of Arts and Sciences at Cornell is a traditional liberal arts college. It is composed of those departments that teach and study the humanities, the basic sciences, mathematics, the social sciences, and the expressive arts. It is also a college within a university, and this wider community provides strength and diversity not available in an isolated undergraduate institution. Students may draw upon the knowledge and facilities of the other undergraduate colleges at Cornell to supplement their studies. Finally, the college is a graduate school and research center attracting faculty whose writing and research require first-rate academic facilities and whose participation in undergraduate teaching brings to their students the most current ideas in modern scholarship. It is this abundant variety that gives the college its distinctive character.

The richness of the curriculum is extraordinary; there is no course that all students must take, and there are several hundred from which they may choose. By choosing courses each semester, students design their own education. They strike a balance between developing known interests and exploring new subjects. They sharpen their verbal and quantitative skills. They also come to understand more thoroughly our common Western tradition and learn something about the non-Western world and its peoples. An education in the liberal arts means honing one's critical capacities, learning more about oneself in nature and culture, and gaining real experience of views of the world radically unlike one's own. All this is highly individual, and the college relies on each student and faculty adviser to select sensible, challenging, and appropriate courses.

Yet the faculty believes that each student's education should have certain common qualities. These include familiarity with several different ways of knowing that are reflected in the natural sciences, in the social sciences, and in those achievements of intellect and imagination that are the focus of the humanities and the expressive arts. In addition to these general areas of knowledge, students study foreign languages, acquire effective writing skills, and concentrate on one particular field to develop, as fully as possible, the powers of imaginative and critical thinking. To accomplish these objectives, the college has certain requirements for graduation.

#### Summary of Basic College Requirements for Graduation

- 1) Freshman writing seminars: Two.
- 2) Foreign language: Up to four courses to obtain qualification in two languages or proficiency in one.
- 3) Distribution: Four approved sequences of two full-semester courses.
- 4) Major

- 5) Electives: Four or five courses (or 15 credits) in courses not used to fulfill other requirements and not in the major field.
- 6) Residence: Eight full-time semesters, unless a student can successfully complete the other requirements in fewer than eight semesters, maintain a B average, and is allowed to accelerate graduation.
- 7) Minimum number of courses: Thirty-four courses. A 2-credit course counts as half a course; a 6-credit language course counts as one and one-half courses.
- 8) Credits: A total of 120 credits, of which 100 must be taken in the College of Arts and Sciences.
- 9) Physical education: Completion of the university requirement. Please note that physical education credit does not count toward graduation or toward the 12-credit minimum required for good standing each semester. See p. 11.
- 10) Application to graduate.

#### Freshman Writing Seminars

See "John S. Knight Writing Program," p. 311.

#### Language Requirement

The faculty considers competence in a foreign language essential for an educated person. Studying another language helps students understand language itself, our fundamental intellectual tool, and opens another culture for exploration. The sooner the student acquires competence, the more useful it will be. Hence work toward the foreign language requirement should be undertaken in the freshman and sophomore years.

The following departments teach foreign languages or literature or both in the College of Arts and Sciences: Africana Studies and Research Center, Asian Studies, Classics, German Literature, Modern Languages and Linguistics, Near Eastern Studies, Romance Studies, and Russian Literature.

The language requirement may be satisfied in one of two ways:

- 1) by attaining *proficiency* in one language or
- 2) by attaining *qualification* in two languages.

#### Proficiency

Proficiency is attained by passing a 200-level course (or Chinese or Japanese 161) or by equivalent achievement, to be determined by examination; see below under "Advanced Standing Credit."

#### Qualification

Qualification may be attained in any of the following four ways.

- 1) Three years of high school study in any one language gives qualification in that language. Note, however, that this route to qualification does not guarantee entrance into a 200-level course. The

student who wants to continue in this language must be placed by examination.

- 2) Passing the requisite course: 102, 123, or 134 in languages taught by the Department of Modern Languages and Linguistics; Chinese 112–114 or Japanese 160, Japanese 141–142–241; Near Eastern Studies 102 or 122 in Hebrew, 112 in elementary classical Arabic, 214 in Egyptian Arabic, or 138 in Turkish; Classics 103 or 104 in Greek; Classics 106 or 107 or 108 in Latin; Classics 112 in modern Greek; 132 in Sanskrit; AS&RC 134 in Swahili.
- 3) A score of 560 or better on the College Placement Test (CPT).
- 4) Placement in a 200-level course by special examination (in cases where no CPT is available).

A student may submit a 560 CPT score at the end of a course numbered 122, thus attaining *qualification* without taking 123. This procedure is optional: the student with a score of 560 or better may want to take 123 to be better prepared for the 200-level courses.

*Note:* Completion of 131–132 language course sequences does not constitute qualification.

Speakers of languages other than English may be awarded credit for their bilingual ability. Their English achievement is measured by the Test of English as a Foreign Language (TOEFL), a requirement for matriculation. Their performance in one other language learned outside the academic environment is measured by examination, and evidence of abilities in reading and writing, as well as speaking, is required. A maximum of 6 advanced placement credits is granted to students who demonstrate *proficiency* equivalent to course work at the 200 level or above at Cornell. Students may not earn credit both for proficiency in their native language and for studying English as a second language at Cornell.

#### Language Course Placement and Credit

Students who have had two or more years of high school study in a language may not enroll in any course in that language without being placed by examination. Nor may transfer students register without examination, even though they may have been given credit for language work elsewhere.

The type of examination depends upon the language course and the level of achievement:

- 1) French, German, Italian, Russian, and Spanish courses: the standardized College Placement Test. Entering students who have not taken the CPT in high school and who want to continue their language study must take the CPT at Cornell during orientation week. Students may retake this examination at Cornell if they have studied the language a year or more since last taking the test. To do this, students register with the Academic and Career Counseling services, 203 Barnes Hall, and pay a fee.

- 2) Latin (all courses except 105 and 107): departmental examination.
- 3) Greek (all courses except 101, 104, and 111): departmental examination.
- 4) Arabic: departmental examination.
- 5) Hebrew: departmental examination.
- 6) Other languages: special examinations; Turkish: department examination; see the professor in charge.
- 7) High achievement (students with a CPT score of 650 or better in French, German, Hebrew, Italian, Russian, and Spanish): the Cornell Advanced Standing Examination (CASE).

An entering or continuing student with high achievement scores should take the Cornell Advanced Standing Examination (CASE); even if the student does not want to do any further work in the language, the CASE may provide proficiency status for the language requirement, and it may provide up to 6 advanced standing credits. Students who do not have high achievement scores are eligible for the courses listed in the charts below, depending on their CPT scores. For other languages, or for special problems, students should see the professor in charge.

#### French

CPT Reading Score	Language Courses	Literature Courses
Below 450	121 or 122	
450-559	123	
560-649	203	200 201 211
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

#### German

CPT Reading Score	Language Courses	Literature Courses
Below 450	121	
450-559	123	
560-649	203	201
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

#### Italian

CPT Reading Score	Language Courses	Literature Courses
Below 450	121	
405-559	123	
560-649	203	201
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

#### Russian

CPT Reading Score	Language Courses	Literature Courses
Below 450	101 121	
450-559	102 123	
560-649	203	201
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

#### Spanish

CPT Reading Score	Language Courses	Literature Courses
Below 450	121	
450-559	123	
560-649	203	201
	211	
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

#### Arabic

Placement by departmental examination.

#### Hebrew

AP 4 or 5 in language, 3 credits. Department determines placement.

#### Turkish

Placement by departmental examination.

#### Advanced Standing Credit

Advanced standing credit may be entered on a student's record as follows: Credit may be granted for high school work for the equivalent of language courses numbered 203, 204. The amount of credit is based on performance on one or more of the following examinations:

- a) CPT Advanced Placement Examination. *French, Spanish, and German*: A score of 4 or 5 yields 3 credits on the French, Spanish, or German language examinations and literature examinations. *Hebrew*: Up to 6 credits may be granted, depending on the student's score on the departmental examination. *Latin*: Students should consult the Department of Classics, 120 Goldwin Smith Hall. They must take the department's own placement examination during orientation week. A student who is permitted to register in a 300-level course on the basis of this examination will be given 6 advanced standing credits. *Greek and Modern Greek*: For information concerning advanced placement, student should consult the Department of Classics, 120 Goldwin Smith Hall.
- b) Cornell Advanced Standing Examination (CASE). To be eligible for this examination the student must have achieved a score of 650 on the CPT. For details on registration, see "Language Course Placement and Credit," above. The maximum amount of credit is 6 credits.
- c) Special examinations are given for languages where no CPT exists.

#### Distribution Requirement

The purposes of the distribution requirement are to acquaint students with a broad range of subject matter in the liberal arts and to provide them with the opportunity to explore new areas.

Accomplishing these purposes is part of the task of freshmen and sophomores. Although completion of the requirements may be spread over the eight semesters, successful introductory course work can be followed up with advanced courses only if undertaken early. For purposes of distribution, subjects are divided into four groups. Each of the first three groups has two subdivisions.

#### Group 1

- a. Physical sciences
- b. Biological sciences

#### Group 2

- a. Social sciences
- b. History

#### Group 3

- a. Humanities
- b. Expressive arts

#### Group 4

- a. Mathematics and computer science
- b. One of the subdivisions not used in fulfillment of groups 1, 2, or 3.

In each of groups 1, 2, and 3, students must take a sequence of two courses (6 or more credits) approved by the department in one subject chosen from either subdivision. For group 4, students are strongly urged to take two courses in mathematics or one in mathematics and Computer Science 100. Those who choose not to satisfy the group 4 requirement with mathematics must choose two courses in one subject from an unused subdivision in group 1, 2, or 3. For example, a student who fulfills group 1 with biology, group 2 with psychology, and group 3 with theatre arts could then complete group 4 with a sequence of two courses from the list below in the physical sciences, history, or the humanities.

Courses fulfilling the distribution requirement must be taken in the College of Arts and Sciences and may be taken for S-U grades. Students may petition to take Architecture 181-182, History of Architecture I and II, in the Department of Architecture of the College of Architecture, Art, and Planning, to fulfill the requirement in expressive arts.

#### Advanced Placement Credit

AP credit is meant to place students into the appropriate level of study and to give them credit for their advanced standing. AP credit counts towards the 120 credits and thirty-four course units required for graduation. The use of AP credit to satisfy distribution requirements is different for each group.

**Freshman Writing Seminars.** Students who score 5 on the AP exam in English are exempt from one writing seminar and are awarded three credits. A score of 4 will give three credits but no exemption from a seminar. These students, as well as those who score 700 or better on the College Placement Test in literature or composition, are eligible to enroll, space permitting, in the following freshman writing seminars: English 270, 271, 272.

**Science.** Beginning with the class of 1990, AP credit may be used to fulfill half the distribution requirement in science. Students who place out of two semesters of introductory science may satisfy the distribution requirement with one non-introductory course in that science or with an introductory sequence of two semesters in another science.

**Social sciences or history.** AP credit may not be used to satisfy this requirement.

**Humanities or expressive arts.** AP credit may not be used to satisfy this requirement.

**Mathematics.** AP credit may be used to fulfill the requirement in mathematics.

Here is a complete list of the courses that fulfill distribution requirements.

### Group 1: Physical or Biological Sciences

#### a. Physical Sciences

**Astronomy:** 101 or 211, plus 102 or 212; or Astronomy 102 or 212, plus Astronomy 332. Astronomy 103–104, identical to Astronomy 101–102 except for the omission of the laboratories, cannot be used to satisfy the distribution requirement for students in the College of Arts and Sciences.

**Chemistry:** 103, 207, 211, or 215 followed by 104, 203, 208, 216, or 222.

**Geological Sciences:** 101, 103, or 111; plus 102, 104, or 202.

**Physics:** Any two sequential courses such as 101–102, 207–208, or 112–213, or any combination of the first term of one sequence and the second term of another. The requirement is also met by any two general education courses from the group 200–206 or by a combination of 101, 112, or 207 with one from the group 200–206.

#### b. Biological Sciences

A two-semester introductory biology sequence selected from Biological Sciences 109–110, or 105–106, or 101/103 plus 102/104. Biological Sciences 107–108, offered during the eight-week Cornell Summer Session for 8 credits, satisfies the distribution requirement. Advanced placement in biology with a score of 4 or 5 (6 or 8 credits, respectively) satisfies half the distribution requirement in the biological sciences. The remainder of the distribution requirement may be satisfied by an upper-level course (200+) offered by the Division of Biological Sciences (*other than Bio. Sci. 200, 202, 205, 206, 208, 209, 301, or 367*); Anthropology 101; or Chemistry 222.

### Group 2: Social Sciences or History

#### a. Social Sciences

**Africana Studies:** Any two of 171, 172, 190, 191, 208, 231, 280, 290, 301, 302, 344, 345, 346, 351, 352, 400, 410, 420, 451, 460, 481, 484, 485, 495, 550, 551, 571.

**Anthropology:** Anthropology 102 and any course (for 3 or 4 credits) in the Department of Anthropology.

**Archaeology:** Archaeology 100 and any one of the following: Archaeology 201, 203, 308, 317, 358, 361, 402, 404, 493, 494, 496, or Anthropology 203, 216, 352, 354, 355, 356, 358, 359, 361, 402, 404, 435, 456, 493, 494, 496, 656, 663, 664, 666, 667.

**Asian Studies:** Any two courses in Asian anthropology, economics, government, linguistics, or sociology given by the Department of Asian Studies or listed there under the areas of China, Japan, South Asia, and Southeast Asia, excluding only Freshman Writing Seminars and courses given outside the College of Arts and Sciences. A reasonable sequence is formed by taking any two courses in the same area, or by taking AS 211, 212, 215, or 218, followed by a social science course in that area. Alternative sequences will, under special circumstances, be considered but require the permission of the director of undergraduate studies.

**Economics:** 101–102, 203–204, or a combination of one of these courses and any course for which it is a prerequisite if the course is taught by a member of the Department of Economics.

**Government:** Any two of 111, 131, 161, 181; or any one of these courses followed by a 300-level course in the same area.

**Linguistics:** 101 and (1) any other course in linguistics or (2) any other course offered by the Department of Modern Languages and Linguistics for which this introductory linguistics course is a prerequisite.

**Near Eastern Studies:** Any two NES archaeology courses at the 200 or 300 level that form a reasonable sequence or combination. NES 197 or 198 plus an NES archaeology course will also satisfy the social sciences requirement.

**Psychology:** Any two courses in psychology with the exception of Psychology 123, 307, 322, 324, 326, 332, 350, 361, 396, 422, 425, 429, 471, 472, 473, 475, 476, 479, 491, 492.

**Sociology:** Any two of 101, 103, 104, 106, or 101, followed by any course at the 200 level or above in sociology.

**Women's Studies:** (a) Any two of 208, 218, 238, 244, 277, 297, 305, 321, 353, 363, 366, 406, 408, 425, 428, 450, 468, 480; or (b) any one of 210, 365, 454, plus one course from list a. (Appropriate courses in women's studies taken previously may be approved by the program.)

**City and Regional Planning:** 100 and 101.

#### b. History

**Africana Studies:** Any two of 203, 204, 205, 283, 344, 350, 360, 361, 370, 381, 405, 460, 471, 475, 482, 483, 490, 510.

**Asian Studies:** Any two courses in Asian history given by the Department of History and listed under the Department of Asian Studies under the areas of China, Japan, South Asia, and Southeast Asia, excluding only freshman writing seminars and courses given outside the College of Arts and Sciences. A reasonable sequence is formed by taking any two courses in the same area, or by taking AS 211, 212, 215, or 218 followed by a history course in that area.

**History:** Any two courses in the Department of History.

**History of Science and Technology:** Any two of the following courses: History 281, 282, 286, 287, 288, 380, 447, 448, 482; also Engineering 250 and 292.

**Near Eastern Studies:** Any two NES history courses at the 200 or 300 level that form a reasonable sequence or combination. NES 197 or NES 198 plus an NES history course will also satisfy the history requirement.

**Women's Studies:** Any two of 227, 238, 273, 307, 336, 357, 426. (Appropriate courses taken previously may be approved by the program.)

### Group 3: Humanities or Expressive Arts

#### a. Humanities

**Africana Studies:** Any two of 202, 211, 219, 422, 425, 431, 432, 450, 455, 525.

**Archaeology:** Archaeology 100 and any of the following: Archaeology 221, 233, 250, 267, 275, 308, 356, 358, 360, 362, 402, 403, 406, 413, 423; Classics 219, 220, 221, 232, 233, 237, 239, 250, 309, 319, 320, 321, 322, 323, 325, 326, 327, 329, 330, 350, 356, 358, 360, 423, 431, 432, 434, 435, 450, 629, 630; Near Eastern Studies 243, 261, 263, 264, 267, 361, 362, 364, 365, 366, 367, 461, 463, 601; English 401, 406, 413, 601, 603.

**Asian Studies:** Any two courses in Asian art, literature, or religion given by the Department of Asian Studies or listed there under the areas of China, Japan, South Asia, and Southeast Asia, excluding only freshman writing seminars and courses given outside the College of Arts and Sciences. A reasonable sequence is formed by any two courses in the same area, or by taking AS 211, 212, 215, or 218, either using two of these courses as a sequence or by following one with a course in the humanities in that area.

**Classics:** (a) any two courses in Greek beginning with 201 or in Latin beginning with 205 that form a reasonable sequence, or (b) any two of the following: Classics 206, 211, 212, 217, 218, 219, 220, 221, 222, 223, 224, 225, 232, 233, 235, 236, 237, 238, 239, 245, 250, 300, 309, 319, 320, 321, 322, 323, 326, 327, 329, 330, 331, 333, 336, 337, 339, 340, 346, 350, 356, 363, 366, 368, 382, 390, 391, 423, 434, 435, 480, 496.

**Comparative Literature:** Any two comparative literature courses at the 200 level or above, including 150; 400-level courses with permission of the instructor or the director of undergraduate studies.

**English:** Any two courses in English at the 200 level or above. If students have used English courses to satisfy the expressive arts requirement, they should not take courses numbered in the 80s (e.g., 281, 382) to satisfy the humanities requirement.

**French Literature:** Any two courses from 200, 201, 202, 222, or 300-level literature courses.

**German Literature:** Any two courses at the 200 level or above.

**Italian Literature:** Any two literature courses at the 200 level or above.

**Near Eastern Studies:** Any two NES civilization or literature courses at the 200 or 300 level that form a reasonable sequence or combination, including Hebrew 201–202, Intermediate Arabic 311–312, Intermediate Modern Hebrew 201–202, Advanced Modern Hebrew 301–302, and Intermediate Turkish 283–284. NES 197 or 198 plus an NES civilization or literature course will also satisfy the humanities requirement.

**Philosophy:** Any two courses with the following exceptions: (1) Philosophy 100, if used to satisfy the freshman writing seminar requirement; (2) a combination of two courses in logic, such as 131, 231, 331, 431, 432, 436.

**Russian Literature:** Any two courses at the 200 level or above except 329, 330.

**Spanish Literature:** Two of 201, 315, 316, 318, or any other 300-level literature courses.

**Women's Studies:** (a) Any two of 248, 251, 264, 348, 349, 363, 365, 366, 390, 402, 404, 445, 456, 460, 474, 475, 476, 481; or (b) any one of 210, 365, 493, plus one course from list a. (Appropriate courses in women's studies taken previously may be approved by the program.)

#### b. Expressive Arts

**African American Studies:** Any two of 209, 285, 303, 425, 430.

**Anthropology:** Any two of 450, 451, 452, 453, or 455.

**Archaeology:** Archaeology 100 and any one of the following: Archaeology 423; History of Art 220, 221, 223, 230, 320, 321, 322, 323, 325, 326, 327, 328, 329, 330, 332, 401, 402, 423, 427, 431, 432, 434, 531, 595.

**English:** Any two of the courses at the 200 level or above that are numbered in the 80s (e.g., 281, 382).

**History of Art:** Any two courses at the 200 level or above, or Archaeology 100 and one of the History of Art courses listed under Archaeology.

**Music:** 6 credits in music, except freshman writing seminars. A maximum of 4 credits in Music 321–322 and a maximum of 3 credits in Music 331 through 338 and 441 through 450 may be used to satisfy this requirement.

**Theatre Arts:** Any two of the 3- or 4-credit courses at the 200 level or above

#### Group 4: Mathematics or an Unused Subdivision

##### a. Mathematics and Computer Science

Any 6 credits in mathematics except 104 and not including more than one course from 105 or 403. Computer Science 100, 211, or 212 may be used for three of these credits. The mathematics distribution requirement is also satisfied by a score of 3 or higher on the CEEB calculus BC examination. Mathematics 109 and Education 005 and 115 (College of Agriculture and Life Sciences) *do not count toward satisfying the requirement.*

##### b. An Unused Subdivision

A sequence of courses in any one of the subdivisions in groups 1–3 that has not been used to fill that group's requirement.

### The Major

In their last two years, students devote roughly one-half their time to acquiring depth and competence in a major subject. The choice of major is not intended to define a student's education or to lead to a lifetime's occupation, although it may do so. By majoring, students focus the full extent of their imaginative and intellectual capacities on something they care about, and sharpen their minds in the process.

Sophomores must be accepted by departments as majors before registering for courses for the junior year. Most departments and programs specify certain prerequisites for admission to the major; students should consult the departmental listings on the following pages. A department may refuse to accept into the

major any student whose performance does not meet departmental standards. To seek admission into a major, students take a copy of their transcript to an appointment with the director of undergraduate studies in their prospective major department.

**Available majors.** Majors are offered by each of the departments. There are also majors in Africana studies, American studies, archaeology, biology and society, dance, German area studies, Russian and Soviet studies, and social relations.

Some students want to pursue an interest that cannot be met within an established major. They may plan, with the help of their faculty adviser, an independent major that includes courses from several departments. See "Independent Major Program," below, under "Special Academic Options."

Students are responsible for completing their majors according to the regulations of their departments. Courses that fulfill major requirements may not be taken for S-U grades.

### Electives

Of the thirty-four courses and 120 credits required for graduation, almost one-third are free electives. How students use these electives frequently makes the difference between an ordinary and a truly interesting curriculum. Students must complete four or five courses or at least 15 credits in courses that are offered outside the major field and are not used to fill another requirement. Students may group electives to form a concentration within one discipline or to cover a topic across several disciplines. Some choose to explore a variety of subjects. Electives taken in other divisions of the university may be used to gain practical training or specialized knowledge. Some students develop a concentration in one particular department or subject outside arts and sciences.

### Residence

Earning a Bachelor of Arts degree from the College of Arts and Sciences normally takes eight semesters of full-time study. Even if the minimum requirements can be met in fewer semesters, the college expects that students will study full-time for eight semesters to take maximum advantage of the resources of the university and obtain a rich liberal arts education. A full semester in an approved program of study abroad, a fieldwork program, the SEA Semester, or Cornell-in-Washington, all of which the college encourages, is considered a semester of residence at Cornell.

Students occasionally enter with advanced placement credit from other institutions (this does not include advanced placement credit from the CPT program, for which regular Cornell credit is granted), take leaves and complete courses at other institutions, or take summer courses at other institutions. The college will accept up to 20 credits from other institutions as part of the out-of-college electives if the appropriate departments at Cornell approve. (This excepts, of course, approved study abroad and in absentia programs, for which up to 30 credits will be accepted, and credits earned by transfer students at their first university.) However, credits earned at other institutions do not replace any of the eight semesters of residence and may not normally be substituted for the final two semesters. Nor may students leave the college after three or three and a half years

and complete their degrees with credits earned at other institutions or through the Cornell extramural division and summer session. Students are not allowed to be part-time students during their eight regular semesters unless they meet the criteria described in the section "Part-Time Study and Pro Rata Tuition" or present convincing academic or medical reasons for part-time study. Semesters as part-time students in the extramural division do not count as semesters of residence.

**Acceleration.** Less than 10 percent of the students in the college graduate in fewer than eight semesters. All accelerants are required to spend a minimum of *six* regular (i.e., full-time spring or fall) semesters at Cornell University, except external transfers, who are required to spend a minimum of *four* regular semesters at Cornell. All accelerants are required to be students in Cornell's College of Arts and Sciences for at least *two* regular semesters.

- Through May, 1991, accelerants must meet either condition *a* or *b* or *c*. After May 1991, they must meet either condition *a* or *b*.
  - To complete the degree in *seven* semesters, students must have finished *sixty* credits by the end of the *third* semester. To complete the degree in *six* semesters, students must have finished *sixty* credits by the end of the *second* semester. Students must have completed the prerequisites for admission to the major in time to spend *four* semesters in the major.
  - To complete the degree in fewer than eight semesters, students must have passed 48 credits in Cornell courses numbered "300" and above. Courses taken at Cornell University, Cornell-in-Washington, the SEA semester, a fieldwork program, or an approved program of study abroad are considered Cornell courses, although all courses not taught in Ithaca in the College of Arts and Sciences are subject to review.
  - To complete the degree in fewer than eight semesters, students must have at least a B average by the time they graduate.
- All accelerants are required to complete 100 credits at C or above.
- No students may use credits earned while on required leave of absence to reduce their terms of residence.
- No accelerants may finish the degree with credits earned in summer or winter session, through part-time study (unless they meet the guidelines for part-time study in the catalogue), or at another institution. That is, they may not exit through any program other than a regular, full-time Cornell Semester.

Students planning to accelerate should present petitions by the beginning of the junior year to the Office of Records and Scheduling, M46 Goldwin Smith Hall.

**Ninth term.** Students may spend a ninth term in residence. They should discuss their program with the assistant dean for seniors and must notify the college in writing of their intention. Students receiving financial aid should discuss funding with an adviser in the Office of Financial Aid.



## Minimum Number of Courses and Credits

Students must complete at least thirty-four courses to graduate, that is, four courses during each of six semesters and five courses during each of two semesters. A 3- or 4-credit course counts as one course; a 2-credit course counts as one-half course. Single-credit courses do not count as part of the thirty-four except in certain cases when they form a part of a series (certain offerings in biology, music, and theatre arts for instance) and two in the same series can be aggregated to count as one-half course. A 6-credit language course counts as 1 1/2 courses, while the summer Falcon Programs in Asian languages count as 10 credits and 2 1/2 courses each. Biology 364, for 6 credits, and most other 5- or 6-credit courses count as one course.

Students must also complete 120 credits, 100 of which must be from courses taken in the College of Arts and Sciences, to earn the Bachelor of Arts degree. Credits earned from advanced placement examinations, courses approved for study abroad, and courses taken in certain off-campus residential programs may be counted towards the 100 credits required within the college and also toward the required thirty-four courses. Credits earned in other colleges at Cornell, or in any subject at U.S. institutions other than Cornell, do not count as part of the 100. The only exception is for courses (usually no more than three) that a department accepts from other colleges at Cornell as fulfilling major requirements.

## Application to Graduate

In the first semester of their senior year, students must complete an application to graduate so that the college can check each student's plan for fulfilling college requirements. This process is intended to help seniors identify problems early enough in the final year so that they may make any necessary changes in course selection to satisfy requirements.

*Meeting graduation requirements is the student's responsibility;* problems that are discovered, even late in the final term, must be resolved before the degree can be granted. Seniors will receive applications and instructions with their preregistration materials for the final semester.

### Attendance at graduation ceremonies.

There are three degree dates in the year: May, August, and January. Students who plan to graduate in August or January are expected to attend the graduation ceremonies *in the following May*.

## Courses, Credit, and College Requirements

A course may not be used to fulfill more than one college requirement, with the following exceptions.

- 1) A course may be used to fulfill a distribution requirement, and also a major requirement, provided that the major adviser agrees.
- 2) A one-semester course in foreign literature that is acceptable for achieving proficiency in that language may also be used as a partial fulfillment of the distribution requirement in the humanities.
- 3) Students whose native language is not English and who take English 211-212, may fulfill both the freshman writing seminar requirement and the appropriate

distribution requirement by taking two freshman writing seminars offered in English, history, history of art, classics, philosophy, romance studies, Russian literature, German literature, or comparative literature.

- 4) Courses used to fulfill college requirements (but not major requirements) may be taken for S-U grades.

**Repeating courses.** Students may repeat courses. If the instructor certifies that the course content has been changed, credit will be granted a second time. If the content has not changed, both grades will appear on the transcript and will be included in any average that is calculated, but credit will be counted toward the degree only once. Students who plan to repeat a course should submit a petition to the Office of Records and Scheduling, M46 Goldwin Smith Hall.

**Attendance** in classes is a matter between students and their instructors. If a student cannot attend classes because of illness or family crisis, the Academic Advising Center will notify instructors when requested to do so, but students must arrange for making up examinations or other work with their instructors. When students will be absent because of religious holidays, they must discuss arrangements for making up their work with their instructors. Students who must miss an examination should be sure to contact the professor in advance. Alternative arrangements are at the discretion of the instructor.

**Transferring credit.** The college evaluates credit received from either another school or college at Cornell University or another accredited institution of collegiate rank to determine the number of credits and courses the student may apply toward the Bachelor of Arts degree. Tentative credit evaluations are normally provided to external transfers at the time of the notification of their admission. No more than 20 credits in courses not commonly given by the College of Arts and Sciences may be applied toward the degree.

Transfer students must successfully complete at least 60 credits and sixteen courses at Cornell; they must be in residence for four regular semesters. Summer session does not count toward the residence requirement. Advanced placement credit awarded by other colleges, either at Cornell or elsewhere, will be re-evaluated by the college and may not be accepted.

**Advanced placement credit.** See p. 6.

**Summer session credit.** A student may earn credit toward the degree by completing courses in Cornell's summer session or by petitioning to take courses at other colleges. Students should consult their advisers regarding summer study plans.

Credit for summer courses not taken at Cornell must be approved by the appropriate Cornell department. The college Office of Records and Scheduling, M46 Goldwin Smith Hall, can supply forms and information. Credit earned in summer courses other than those at Cornell will not count toward the 100 credits required in the college except for summer programs abroad if sponsored by Cornell Abroad, for which from 3 to 8 credits may be earned and counted as in-college credit. Transcripts from other institutions should be sent to the Office of Records and Scheduling, M46 Goldwin Smith Hall.

Entering students who want to receive credit toward the degree for courses completed in a summer session at Cornell or elsewhere should have transcripts sent to the Office of Records and Scheduling, M46 Goldwin Smith Hall, during the summer before matriculation. Credits completed in Cornell summer sessions will be given automatically.

Summer session at Cornell or elsewhere does not count toward the eight-semester residence requirement.

**Non-credit courses.** The college does not grant credit toward the degree for every course offered by the university. Courses in remedial or developmental reading (for instance, Human Ecology 100) and supplemental science and mathematics courses offered by the Learning Skills Center, carry credits that are counted toward good standing in a given semester but not toward graduation. Physical education, typing, shorthand, and military training courses are among those for which credit is not given. Faculty legislation strictly prohibits granting credit toward the degree for service as an undergraduate teaching assistant.

**Auditing.** The college encourages its students to take advantage of its rich curriculum by sitting in on courses that interest them but do not fit into their schedules for credit. As long as the instructor agrees, students are welcome to visit courses. Small seminars and language courses are sometimes not open to visitors. Audited courses do not, of course, appear on the student's schedule or transcript.

## Physical Education

See "University Requirements for Graduation," p. 11. The college does not count physical education credit toward the 120 credits required for graduation, nor does physical education credit count toward the twelve credits required for good standing each semester.

## SPECIAL ACADEMIC OPTIONS

### Degree Program

The following programs allow students to work toward more than one degree or to alter the regular college requirements or departmental requirements for the major.

### Independent Major Program

The Independent Major Program allows students to design their own interdisciplinary majors if they want to pursue an interest that cannot be met within an established major. Proposals for an independent major must be supported by a faculty adviser and are assessed by a board of faculty members. Board members consider whether the plan is equivalent in coherence, breadth, and depth to a departmental major, whether it is well suited to the student's academic preparation, and whether it provides a liberal education. Independent majors substitute for established majors, but students must still satisfy all the other requirements for the baccalaureate degree. Students should contact the director of the Independent Major Program, Academic Advising Center, 55 Goldwin Smith Hall, for further information. Deadlines for submitting independent major proposals are listed on the calendar supplement for the College of Arts and Sciences.

### College Scholar Program

The College Scholar Program frees no more than forty students in each freshman class from the usual college requirements for a degree and allows them to design their own academic programs. It is meant to serve students whose interests and talents do not easily fit into the usual departmental majors, who demonstrate exceptional promise, and who show the maturity to plan and carry out, with the help of their adviser, a well-designed program of studies. College Scholars do not all design the same kind of program: Some, for instance, pursue diverse interests, while others integrate a variety of courses with a common theme.

College Scholars must complete 120 credits of course work (100 in the college), 34 courses, and, unless they receive special permission from the program to accelerate, eight full terms of undergraduate study. They must complete the physical education requirement. All College Scholars must complete a senior project. They are not required to complete or fulfill the distribution requirements, although members of the College Scholar Advisory Board believe that the spirit of the requirement is a good one.

Each applicant to the College Scholar Program is asked to write an essay, which is due the last Wednesday in April of the freshman year. Students should contact the Academic Advising Center, 55 Goldwin Smith Hall, for further information.

### Double Majors

A student may complete a double major by fulfilling the major requirements in any two departments of the college. No special permission or procedure is required. Students need, however, to become accepted into both majors and be assigned an adviser in each department. Both majors will be posted on the official transcript.

### Dual Degree Programs with Other Colleges

Especially ambitious and diligent students may earn both a Bachelor of Arts degree from the College of Arts and Sciences and (1) a Bachelor of Science degree from the College of Engineering or (2) a Bachelor of Fine Arts degree from the Department of Art in the College of Architecture, Art, and Planning or (3) a Bachelor of Science degree in urban and regional studies from the Department of City and Regional Planning in the College of Architecture, Art, and Planning or (4) a Bachelor of Science degree in architectural history from the College of Architecture, Art, and Planning. Dual Degree Programs ordinarily take five years to complete. Students enter one of these colleges as freshmen and begin the dual degree program with the second college in the second or, in some cases, the third year. For further information students should contact assistant dean Rosenberg, Academic Advising Center, 55 Goldwin Smith Hall.

### Double Registration with Professional Schools

Double registration in the College of Arts and Sciences and with the Cornell Law School and Cornell Medical College is possible. A few exceptionally well prepared students who have earned 105 credits before the start of the senior year and have been accepted by one of the above-named professional schools may be permitted to register simultaneously in the college and in one or another of these

professional schools during the seventh and eighth terms.

Students interested in the joint program with the Law School should see the assistant dean for the senior class, Academic Advising Center, 55 Goldwin Smith Hall.

Students registering in the college and in the Cornell Medical College receive the Bachelor of Arts degree after the first year of medical studies and the Doctor of Medicine degree after the remaining three years of medical college are completed. Interested students should contact Jane Crawford, health careers coordinator, 203 Barnes Hall.

Double-registered students must, of course, complete all requirements for the B.A. degree, including 100 credits in College of Arts and Sciences courses.

### Special-Interest Options

The following options do not alter the college's requirements but enable students to pursue special interests within the usual program. Independent course work is involved in independent study and in the Undergraduate Research Program; premedical and prelaw counseling help students make appropriate use of the regular curriculum.

#### Independent Study

Independent study affords students the opportunity to pursue special interests not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the course, must approve the student's program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study. Consult the Office of Records and Scheduling, M46 Goldwin Smith Hall, for information. In one semester students may earn up to 6 credits with one instructor or up to 8 credits with more than one instructor.

#### Undergraduate Research Program

The Undergraduate Research Program enables students to gain firsthand experience in scholarly research by participating in a faculty member's research project. Participation is recognized by course credit, since the program emphasizes what students will learn rather than what they will contribute to the project. However, students sometimes make contributions of a very high order and publish the results of their work.

Besides learning research methods that are appropriate to the discipline, students gain awareness of their own research interests and abilities, self-discipline, new insight into the subject matter, and the pleasure of working as scholar-apprentices with professors and other students who share a common interest.

Students interested in this program should see assistant dean Williams, Academic Advising Center, 55 Goldwin Smith Hall.

#### Language Study

More than forty languages are taught in the College of Arts and Sciences; some of them are available only at Cornell. A full range of language, literature, and cultural courses are available in most of the major ancient and modern languages through the joint efforts of the Department of Modern Languages and Linguistics and the departments that specialize in literary and cultural study: the Africana

Studies and Research Center and the departments of Asian Studies, Classics, German Literature, Near Eastern Studies, Romance Studies, and Russian Literature. Semi-intensive courses afford students the option of accelerating the development of language skills.

#### FALCON Program (Full-Year Asian Language Concentration)

FALCON allows students who are interested in the Far East to study Chinese, Japanese, or Indonesian exclusively for one year. They gain proficiency in the language and familiarity with the culture. Students who are interested in the Far East should be aware of the opportunities here to pursue rapid and thorough beginning studies on campus with the objective of studying abroad later—in China, Japan, or Southeast Asia.

#### Language House Program (136 Goldwin Smith Hall)

Beatrice B. Szekely, academic administrator

A complement to classroom cultural and linguistic instruction, the Language House Program combines residential and academic opportunities for developing and practicing conversational skills in French, Spanish, German, and Mandarin Chinese. It provides preparation for students who plan to study abroad and serves as a place for returning students to share their cultural experiences while further increasing their language skills.

#### Prelaw Study

Law schools neither require nor prefer any particular program of study; they do seek students with sound training in the liberal arts. It is important that students plan a program in which they are interested and do well. Beyond that, students are advised to take courses that will develop the powers of precise, analytical thinking and proficiency in writing and speaking.

The college offers a concentration in law and society. Students should work towards completion of this concentration because they are interested, not because they believe it will convince law schools of their interest.

The adviser for students in the College of Arts and Sciences who are applying to law school is assistant dean Buettner, Academic Advising Center, 55 Goldwin Smith Hall.

#### Premedical Study

The breadth and depth afforded by a liberal arts education are invaluable for people who plan medical careers, whether they intend to practice or go into medical research. Such training has a profound effect on the doctor's usefulness to patients, and it affords the flexibility of mind that is needed for major research undertakings. Medical and dental schools do not prescribe or even prefer a particular major; they do, however, require particular undergraduate courses. Students who are interested in medical careers are urged to visit the Health Careers Office, 203 Barnes Hall.

The adviser for students in the College of Arts and Sciences who are planning careers in medicine is assistant dean Turner, Academic Advising Center, 55 Goldwin Smith Hall.

## Off-Campus Programs

Many students find it important to their majors or to their overall academic programs to study abroad for one or two semesters. When it makes academic sense, the college encourages its students to pursue such studies and grants credit toward the degree for work satisfactorily completed.

### Study Abroad

In 1989-90, 234 students in the college studied abroad. Cornell has established affiliations with several universities and programs in Africa, Australia, Belgium, Britain, China, Denmark, Egypt, Indonesia, Israel, and Sweden, as well as its own programs in France, Germany, Italy, Japan, Spain, and Switzerland. Students have studied in those countries and in others all over the world. Before planning a program for study abroad, students should consult assistant dean Rosenberg, in the Academic Advising Center, 55 Goldwin Smith Hall, who will help them find the program most appropriate to their academic goals.

A request to study abroad must have the support of the faculty adviser, and the college. A maximum of 30 credits for a year or 15 credits for a semester may be earned abroad. These credits may count as part of the 100 credits required within the College of Arts and Sciences. On returning, students must seek approval of the courses completed abroad from the appropriate departments. Normally, transfer students entering as juniors will not be allowed to study away from Cornell.

Students studying abroad must be in good academic standing the semester prior to departure. No more than two semesters abroad are allowed.

Seniors who wish to study abroad during their *final semester* must petition the college for permission to do so, but such permission is only rarely granted.

### Summer Residential Programs in Archaeology

During the summer months students may participate in a Cornell-sponsored archaeological project. In recent years the program has organized archaeological projects in New York State, Central America, South America, and the Mediterranean region. Students should contact the Archaeology Program for information about the sites available this summer.

### Marine Science

Shoals Marine Laboratory is a seasonal field station designed to introduce undergraduates to the marine sciences. The laboratory is located on Appledore Island, six miles off the Maine and New Hampshire coasts. Students should contact the Division of Biological Sciences for further information.

### Cornell-in-Washington

The Cornell-in-Washington program enables a limited number of advanced students to study questions of public policy and to do supervised research during a term of residence in the capital. Students choose among several seminars. They become familiar with the various sources of information and develop research techniques. The program also offers a unique internship program. Students who want to serve an internship in a federal agency or congressional office take part in a public-policy seminar. They define and carry out individual research projects that explore the

connections between abstract policy issues and the day-to-day activities of the office. Potential internships are arranged through, and approved by, the Cornell-in-Washington program. Students are admitted to the Cornell-in-Washington program by the Department of Government. For further information, see p. 21 or inquire at 134 McGraw Hall.

### Fieldwork

Sometimes it is appropriate for students to include fieldwork as part of their major. A three-member faculty committee helps the student plan the project, arranges for ongoing supervision, and evaluates the project at the end of the term. Fieldwork almost always involves writing a long paper or several short ones, as well as practical experience. All proposals for fieldwork must be presented in advance to the Academic Records Committee for approval. A maximum of 15 credits in fieldwork may be earned. For further information students should contact assistant dean Unsworth, Academic Advising Center, 55 Goldwin Smith Hall.

## ADVISING

The following advisers and offices provide information on college procedures and regulations, academic advising, or counseling.

### Faculty Advisers

Faculty advisers help students design programs of study and advise students about ways to achieve their academic goals. Faculty members volunteer to act as advisers to new students in the college; advisers and advisees meet during orientation week to plan the student's program. Students are encouraged to see their advisers again early in the term, before it is too late to drop courses and before signing into courses for the following term, to discuss their academic program and to become better acquainted. Academic difficulties may frequently be solved or avoided if students and advisers recognize problems early.

Students who would like to petition for an exception to college rules should discuss the matter with their advisers.

Advisers may also help students with study or personal problems or direct them to other offices on campus where help is available.

### Student Advisers

Each new student is also assigned a student adviser who can provide information about the college's requirements, courses and instructors and about life at Cornell.

### Major Advisers

After acceptance into a major program, students are assigned a major adviser, a faculty member in the major department, with whom they make many of their most important decisions at Cornell. The adviser eventually certifies the completion of the major. The major adviser should be consulted by the student about all academic plans, including honors, study abroad, acceleration, and graduate study. The adviser's support is especially important if a student petitions for an exception to the requirements for the degree.

## Academic Advising Center

The Academic Advising Center, 55 Goldwin Smith Hall, serves as a resource for faculty and student advisers and for students themselves and their parents. The assistant deans (one for each class, one for minority students, and two for special programs) are available there to help students define their academic and career goals and to help with special academic options such as study abroad, undergraduate research, fieldwork, and exceptions to college rules.

## REGISTRATION AND COURSE SCHEDULING

### Registration with the University

All students must register with the university at the beginning of each semester. Students may register if they are academically eligible and have satisfied the payment of their tuition. Registration materials are available at a time and place announced each term by the Office of the University Registrar.

### Enrollment in Courses in the College of Arts and Sciences

Students must enroll in courses through the Office of Records and Scheduling in the college, M46 Goldwin Smith Hall.

### New Students

The Academic Advising Center conducts briefings during orientation week for incoming freshmen and transfer students about procedures for scheduling courses.

### Continuing Students

Continuing students are expected to select and schedule courses in advance during the previous term. Students who fail to sign into courses during the designated period must wait until the beginning of the semester and may have difficulty securing places in the courses they desire. Students may schedule up to five courses during the pre-course enrollment (pre-registration) period. Information and materials will be available in the Records and Scheduling Office, M46 Goldwin Smith Hall. Before signing into courses, students should make appointments with their faculty advisers to plan their programs. Pre-course enrollment (pre-registration) is the best time to discuss long-range goals with faculty advisers. Students who do not have majors must submit an academic plan, approved by their faculty adviser, with their proposed schedule. Student advisers will also assist students. All students are welcome to discuss programs and plans with an assistant dean in the Academic Advising Center, 55 Goldwin Smith Hall.

The Records and Scheduling Office issues a supplement to *Courses of Study* showing last-minute changes in courses; the supplements of other divisions of the university are also available for reference in the Office of Records and Scheduling. Continuing students receive their course schedules at university registration. In the fall they also receive a copy of their transcript and a record of their progress toward the degree, which shows the courses taken, grades received, graduation requirements fulfilled, and academic actions. These are not official transcripts, but they reflect the official record and should be corrected in the Records and Scheduling Office if they are incorrect.

### Limits on Courses and Credits

Students must take four courses during each of six semesters, five courses in each of two semesters, and average fifteen credits each semester in order to graduate in eight terms. At a minimum, students must carry twelve credits per semester; if for compelling personal or academic reasons students need to carry fewer than twelve credits, they should consult their faculty adviser and the assistant dean of their class. Permission is by petition only. Completion of fewer than twelve credits without permission results in unsatisfactory academic standing. First-term freshmen may not register for more than eighteen credits; other students may register for more than eighteen credits a term only if their previous term's average was a B or higher. No more than twenty-two credits may be taken in a regular semester without permission of the Committee on Academic Records.

*Any student who is not officially enrolled in a schedule of courses by the end of the third week of classes may be withdrawn from the college.*

### Forgery on Forms

Forging signatures or credentials on college forms is an academic offense; sometimes it constitutes academic fraud. In all cases of forgery on academic forms, the effect of the forged documents shall be negated. Students may then petition properly to do whatever they attempted to do improperly. Such incidents will be recorded in the Academic Integrity Hearing Board confidential file for forgeries. If a student forges more than once or if the forgery would advance the student's academic standing unfairly or fraudulently or if, for any other reason, the situation requires some other response in addition to the uniform penalty, the Academic Integrity Hearing Board might make a different recommendation, such as a notation on the student's transcript, suspension, or dismissal.

### Special Registration Options

#### Adding and Dropping Courses

After advance course enrollment, students may not add or drop courses until the new term begins. All program changes must be approved by the department and also by the faculty adviser (for juniors and seniors only). During the first three weeks of the semester, course changes may be made without fees. Add/drop forms are available in the Records and Scheduling Office, M46 Goldwin Smith Hall.

After the third week of classes courses may be added, and after the eighth week courses may be dropped, *only* by petition. Students may withdraw from courses between the ninth and twelfth weeks of the term *only* if (1) the instructor certifies the student has worked hard to master the material and has completed assigned work and taken exams, (2) the instructor approves, and (3) no issue of academic integrity is at stake. Students who want to withdraw from a course after the eighth week of the term must meet with an assistant dean and submit a petition by the end of the twelfth week of the semester. The records of students whose course loads drop below 12 credits will be reviewed at the end of the semester.

Courses dropped after the eighth week will be noted on the transcript by a "W" where the grade would normally appear. No petitions to withdraw from courses may be submitted after the end of the twelfth week in the term. Deadlines for short courses will be adjusted according to the length of the courses. After the midpoint of a short course, students who wish to add or drop the course must petition to do so.

For each course change approved after the third week there is a \$10 fee.

### Leaves of Absence

Taking time off from college to think about goals and progress, to gain additional experiences or funds, or just to take a break from studying is sometimes useful to students. Those in good standing who take a leave by the end of the eighth week of the semester are welcome to register in the college the following semester. Five years is the maximum length of time a student may be on leave and return without special permission. Leaves of absence are of four types.

- 1) *Personal leaves* impose no conditions concerning the right to reenter the college except for the five-year limit. Readmission is automatic if a written request is made one month before the beginning of the term in which the student wishes to return.
- 2) *Medical leaves* are granted by the college only on recommendation by a physician from Gannett Health Center. Such leaves are granted for an unspecified length of time (up to five years) with the understanding that the student may return at the beginning of any term after the medical condition in question has been corrected. In some cases students must satisfy the Gannett Health Center that the condition has been corrected before they may return. The student's academic standing will also be subject to review at the time of the leave and on return.
- 3) *Conditional leaves* may be granted if the student is not in good standing or, in unusual circumstances, after the eighth week of the term. Normally students may not return from conditional leaves for at least two terms or until specific and individual conditions, such as completing outstanding work, have been met.
- 4) *Required leaves:* The Academic Records Committee may require a leave of absence if a student is in academic difficulty. See the section "Academic Actions."

Any student who wishes to take a leave of absence should consult an assistant dean in the Academic Advising Center. On readmission, the student's graduation date will be recalculated according to the number of terms completed, the number of acceptable credits earned toward the degree, and the requirements for graduation. *Students who take courses elsewhere while on leave, may petition to have credits accepted as part of the 20 out-of-college credits allowed toward the 120 credits needed for graduation. Approval depends on the judgment of the relevant departments and acceptable grades.* Credits earned on leave do not count toward the eight semesters of residence unless a student petitions successfully to accelerate. See the section "Residence."

### Withdrawals

A withdrawal is a voluntary severance of connection with the university. If a student wants to withdraw after registering for the term, the withdrawal must be requested before the end of the eighth week of classes to avoid grades of "W" on the transcript. A notation of "W" will appear on the transcript for any course dropped after the eighth week. On withdrawal it is assumed that the student will not want to reregister in the college. Students who seek readmission after withdrawing from the college write an appeal to the Committee on Academic Records. If a student fails to register for a term and does not request a leave, the student will be withdrawn from the college for failure to register.

### Transferring within Cornell (Internal Transfer)

Internal transfer from one college or school at Cornell into another is attractive for many students whose intellectual interests change. Students who want to transfer should discuss their eligibility with a counselor at the new school or college.

In some cases students who want to transfer into the College of Arts and Sciences may transfer directly. In other cases they may be referred to the Division of Unclassified Students. During the term immediately preceding transfer into the College of Arts and Sciences, students should complete at least 12 credits of courses in the College of Arts and Sciences with superior grades and without any grades of *Incomplete*, any S-U grades (unless only S-U grades are offered for that particular course), or any grades below C. Satisfying this minimum requirement does not, however, guarantee admission. Admission to the college is based on consideration of the student's entire record at Cornell and the high school record, not just the work of one semester. Interested students should see assistant dean Unsworth, in the Academic Advising Center, 55 Goldwin Smith Hall.

### Part-Time Study

The college ordinarily expects its students to be full-time students. Except in the case of Ithaca residents who are twenty-three years of age or older, part-time attendance is permitted only in unusual circumstances.

In certain circumstances seniors who are completing their final term in the college may be allowed to register in the Division of Extramural Study for fewer than 12 credits. Tuition is charged per credit. The guidelines for granting this permission are adhered to strictly.

Guidelines for part-time study:

- 1) A student who has completed all degree requirements by the end of the seventh term, and could have received permission to accelerate, may receive permission to study part-time during the eighth term.
- 2) A student who has completed all degree requirements in seven terms but is majoring in a department that requires candidates for honors to complete the thesis in the eighth term may be permitted to register for fewer than 12 credits.



- 3) A student who has received permission to accelerate, but who has been forced to drop a course (for reasons beyond his or her control) and has not been able to complete the course work on schedule, may be able to complete the requirements as a part-time student.
- 4) A student who is pursuing honors work and must complete extensive research away from the campus, which precludes registering for additional courses, may be allowed to register for fewer than 12 credits.

## ACADEMIC STANDING

Students are in good standing for the term if they successfully complete at least 12 credits by the end of the term and receive no more than one D and no F or U grades. If a student completes only three courses, all grades must be above D. In addition, students are expected to make satisfactory progress toward satisfying requirements for the degree. They are expected to earn grades of C (not C-) or better in at least 100 of the total credits for the degree.

## Honors

### Dean's List

Inclusion on the Dean's List for academic excellence is an honor bestowed by the dean of the college. The criteria are subject to change from semester to semester and are available in the Office of Records and Scheduling, M46 Goldwin Smith Hall.

### Bachelor of Arts with Honors

Almost all departments offer honors programs for students who have demonstrated exceptional ability in the major and who seek an opportunity to explore branches of their subject not represented in the regular curriculum or to gain experience in original research. The honors programs are described by individual departments in the following sections. The degree of Bachelor of Arts with honors will be conferred upon students who, in addition to having completed the requirements for the degree of Bachelor of Arts, have satisfactorily completed the honors program in their major and have been recommended for the degree by their major department, the Independent Major Program, or the College Scholar Program. *Concentrations, however, do not offer honors programs.*

### Bachelor of Arts with Distinction

The degree of Bachelor of Arts with distinction in all subjects will be conferred on students who, in addition to having completed the requirements for the degree of Bachelor of Arts, have:

- 1) completed at least 60 credits while registered in regular sessions at Cornell;
- 2) ranked in the upper 30 percent of their class at the end of their seventh semester, or next-to-last semester for transfers and accelerants;
- 3) received a grade below C- in no more than one course;
- 4) received no failing grade;
- 5) maintained good standing in each of their last four terms; and

- 6) have no *Incompletes* remaining on their records.

## Failure to Maintain Good Standing

Students are not in good standing if they complete fewer than 12 credits, except for second-semester seniors who need fewer credits and courses to graduate; if they have more than one D, or one D in a schedule with only three courses, or any F or U grades; if they have not made satisfactory overall progress in grades or credits (whether due to failures or *Incompletes*) or in the requirements of the college or the major. Such students will be considered for academic action by the Committee on Academic Records or one of the deans of the college.

## Academic Actions

**Warning.** Any student who fails to maintain good standing will at least be warned. The warning may be given by an assistant dean in the college or by the faculty's Committee on Academic Records. A warning is posted on a student's unofficial college transcript but is not reported to the university registrar and does not appear on official transcripts.

**Required leave of absence.** A student in serious academic difficulty may be required by the Committee on Academic Records to take a leave of absence, normally for a full year. Usually, but not necessarily, the Committee on Academic Records warns students before suspending them. Before being allowed to return and reregister in the college, students must submit a plan for completing the degree. In some cases the students will be required to furnish evidence that they are ready to return before being allowed to reregister in the college. Students who request to return in less than a year must present to the committee exceptionally strong evidence of their readiness to return. "Required Leave of Absence" is posted on the student's unofficial college transcript; the university registrar is notified, and "Leave of Absence" and the date will appear on the student's official transcript.

**May not reregister.** The Committee on Academic Records may dismiss a student from the college because of a highly unsatisfactory record for one term or for failure to make satisfactory overall progress in grades, credits, or the requirements of the major. This action expels the student permanently from the college. "May Not Reregister" is posted on the student's unofficial college transcript, the university registrar is notified, and "May Not Reregister in the College of Arts and Sciences" and the date will appear on the official transcript.

Students being reviewed for academic action are urged to present evidence that will help explain their poor academic performance. Students may appeal a decision or action of the committee if they have new relevant information to present.

## GRADES

### Letter Grades

See Grading Guidelines.

### S-U Grades

The S-U option allows students to explore unfamiliar subject areas without being under pressure to receive high grades. It is not meant to reduce the amount of work a student completes in a course or the amount of effort a student devotes to a course. Students may elect during the first three weeks of the term to receive a grade of S (satisfactory) or U (unsatisfactory) instead of one of the letter grades (A+ through F), provided that the instructor is willing to assign such grades.

**Students may not elect the S-U option after the third week of the term.** A grade of S is equivalent to a grade of C- or higher; a grade of U, which is equivalent to any grade below C-, is a *failing* grade equal to an F. S means the student receives the credit specified for the course. U means no credit is given. A few courses in the college are graded exclusively S-U; in that case, the final grade appears on the transcript as SX or UX.

Courses that will count toward satisfaction of major requirements should not be taken for an S or U grade unless the department grants permission. Students may elect the S-U option in courses used to satisfy the distribution and language requirements, provided that such courses do not also count toward major requirements or serve as prerequisites for admission to the major. Students are advised to use the S-U option sparingly if they intend to apply to graduate school or for transfer to another college. There is no limit on the number of courses each term for which students may elect the S-U grade, but within the 120 credits required for the degree, a minimum of 80 credits must be in courses for which a letter grade was received.

With special permission students may change from S-U to a letter grade within the first five weeks of the term, although a \$10 fee is charged after the third week.

### Grades of Incomplete

A grade of incomplete signifies that a course was not completed before the end of the term for reasons beyond the student's control that are acceptable to the instructor. Students must have substantial equity in the course; that is, they must be able to complete the remaining work without further registration and must have a passing grade for the completed portion. When a grade of incomplete is reported, the instructor will state what work must be completed, when it must be completed, and the grade earned if the work is not completed by that date. Unless the instructor stipulates otherwise, students will be allowed one term plus one summer to make up the work. When a final grade is reported, it is recorded on the official transcript with an asterisk and a footnote explaining that this grade was formerly an incomplete.

Once a grade of incomplete is assigned, the college does not change it unless and until the faculty member submits a change of grade form or gives written permission to "freeze" it as an incomplete.

Students must consult the instructors to resolve any incompletes before graduation.

## R Grades

R designates two-semester or year-long courses. The R is recorded on the student's transcript at the end of the first term. The grade recorded at the end of the second term shows the student's level of performance in the course for the entire year. The total credits that will be earned for the whole course are listed each term.

## Grade Reports

Grade reports for the fall term are included in spring-term registration materials; grade reports for the spring term are mailed to students at their home addresses.

The college does not compute class rank.

## CALENDAR SUPPLEMENT

All of the dates in the university calendar at the front of this volume apply to all Cornell students. Listed below are some additional dates that are of importance for students in the College of Arts and Sciences.

	<i>Fall</i>	<i>Spring</i>
First deadline for submitting independent major requests. Go to Academic Advising Center, 55 Goldwin Smith Hall, for further information.	Sept. 24	Feb. 25
Last day for adding courses without petition.	Sept. 21	Feb. 8
Last day for dropping courses without \$10 fee.	Sept. 21	Feb. 8
Last day for changing grade option (S-U).	Sept. 21	Feb. 8
Second deadline for submitting independent major requests. Go to Academic Advising Center, 55 Goldwin Smith Hall, for further information.	Nov. 26	April 1
Last day for requesting leave of absence or withdrawal for the current term.	Oct. 26	March 15
Last day for dropping courses without petition.	Oct. 26	March 15
Deadline for applying to study abroad.	See assistant dean Rosenberg, Academic Advising Center	
Pre-course enrollment (pre-registration) for the following term (tentative).	Oct. 24–Nov. 7	March 27–April 10
Last day to petition to drop a course.	Nov. 16	April 16
Deadline for applying to the College Scholar Program.		April 24
Deadline for requesting internal transfer to the College of Arts and Sciences for the following term.	Dec. 1	May 1

## ADMINISTRATION

Geoffrey V. Chester, dean – 255-4146  
 Philip Lewis, associate dean – 255-4147  
 Don Randel, associate dean – 255-4147  
 Lynne S. Abel, associate dean – 255-3386  
 Glenn C. Altschuler, associate dean, director of academic advising and dean for freshmen – 255-5004  
 Thak Chaloemtiarana, associate dean and director of admissions – 255-7061  
 Bonnie Buettner, assistant dean for seniors – 255-5004  
 Beatrice G. Rosenberg, assistant dean, academic advising (including: study abroad, dual degree programs, fellowships and scholarships) – 255-5004  
 Janice Turner, assistant dean, minority affairs and premedical adviser – 255-5004  
 Margaret C. Unsworth, assistant dean, sophomores and juniors – 255-5004  
 Marilyn Williams, assistant dean, undergraduate research and academic integrity – 255-5004  
 Patricia Dougherty, college registrar – 255-5051  
 Michele T. Crane, associate registrar – 255-5246

## Courses and Departments

### SPECIAL PROGRAMS AND AREAS OF CONCENTRATION

The college offers a number of special and interdisciplinary programs that are described following the departmental program descriptions. Students may devise an independent major with the aid of any of these programs or develop an informal minor field. (Informal minors are not listed on the student's official record.)

### GENERAL EDUCATION COURSES

The introductory and advanced courses offered by departments in their respective disciplines and fields comprise the bulk of the curriculum in the College of Arts and Sciences. Most of these courses are accessible to almost all students who are interested in them. However, the faculty of the college also offers general education courses, including interdisciplinary courses for a broad audience, courses that provide insight into a particular discipline for students who are not specializing in that field, and courses for advanced students who consider a discipline in terms of its history, its presuppositions, or its relation to other branches of knowledge. The following courses have been identified by the various departments of the College of Arts and Sciences as particularly appropriate, by that definition, for general education. For full course descriptions consult the departments' sections of the catalog.

## American Studies

Some professors in English and history with an interest in American studies regularly teach courses that emphasize the interconnections of literary and historical materials. Some courses focus on these interconnections with a nonspecialist audience in mind; others aim at an upper-level audience to put literature and history in a comparative perspective with respect to a common subject. These purposes may suit not only American studies, English, or history majors, but the general-education interests of nonmajors. Members of the American Studies Committee can be consulted about the pertinence of their courses to general education.

## Archaeology

Several members of the Archaeology Program offer general education courses suitable for nonmajors. These are listed under the departments that offer archaeology courses, such as the departments of Anthropology, Classics, History of Art, and Near Eastern Studies. The Archaeology Program itself also offers:

### 203 Early People: The Archaeological and Fossil Record (also Anthropology 203)

Fall. 3 credits.  
 T R 11:40–12:55. T. P. Volman.

## Asian American Studies

### 110 Introduction to Asian American Studies

See Special Programs and Interdisciplinary Studies.

## Asian Studies

### 211 Introduction to Japan

Fall. 3 credits.  
 M W 11:15; disc., see course roster.  
 N. Sakai.

### 212 Introduction to China

Spring. 3 credits (4 credits with a special project; consult instructor for information).  
 T R 1:25 plus disc, R 2:30 (3 sections), or F 10:10 (2 sections), 11:15, or 1:25 (1 section). E. M. Gunn.

### 215 Introduction to South Asian Civilizations

Fall. 3 credits (4 credits with a special project; consult instructor for information).  
 M W F 11:15. C. Minkowski.

### 218 Introduction to Korea

Spring. 3 credits.  
 T R 1:25. Sections to be arranged.  
 D. McCann.

## Astronomy

[490 Senior Seminar—Critical Thinking  
 Spring. 3 credits. Prerequisite: permission of instructor. Not offered 1990–91.  
 Hours to be arranged. C. Sagan.]

## Classics

### 211 The Greek Experience

Fall. 3 credits.  
 M W F 11:15. F. Ahl.

### 212 The Roman Experience

Spring. 3 credits.  
 M W F 1:25. D. Mankin.

**217 Initiation to Greek Culture**

Fall. 4 credits.  
M W F 10:10, plus 1 hr. to be arranged.  
P. Mitsis, P. Pucci.

**218 Initiation to Roman Culture**

Spring. 4 credits.  
M W F 10:10, plus 1 hr. to be arranged.  
F. Ahl, J. Whitehead.

**[219 Mediterranean Archaeology (also Near Eastern Studies 267)]**

Fall. 3 credits. Not offered 1990–91.  
M W F 12:20. J. Coleman.]

**220 Introduction to Art History: The Art of the Classical World (also History of Art 220)**

Spring. 3 credits.  
M W F 10:10. A. Ramage.

**221 Minoan-Mycenaean Art and Archaeology (also Archaeology 221 and History of Art 221)**

Fall. 3 credits.  
M W F 10:10. P. I. Kuniholm.

**223 The Comic Theater**

Spring. 3 credits.  
M W F 12:20. J. Rusten.

**[225 Hellenistic and Roman Philosophy**

4 credits. Not offered 1990–91.  
P. Mitsis.]

**235 Modern Greek Poetry and Politics (also Comparative Literature 235 and Government 335)**

Fall. 3 credits.  
T R 1:25–2:40. G. Holst-Warhaft.

**236 Greek Mythology (also Comparative Literature 236)**

Fall. 3 credits.  
T R 11:40–12:55. D. Mankin.

**[237 Greek Religion and Mystery Cults**

Spring. 3 credits. Not offered 1990–91.  
T R 11:40–12:55. K. Clinton.]

**[238 The Ancient Epic**

Spring. 3 credits. Not offered 1990–91.]

**239 Greek and Roman Mystery Cults and Early Christianity**

Spring. 3 credits.  
To be announced. K. Clinton.

**[250 Etruscan Art and Archaeology**

Fall. 3 credits. Not offered 1990–91.  
J. Whitehead.]

**[300 Greek and Roman Drama (also Comparative Literature 300)]**

4 credits. Not offered 1990–91.]

**[337 Ancient Philosophy of Science**

Spring. 4 credits. Not offered 1990–91.]

**[339 Ancient Wit (also Comparative Literature 339)]**

Fall. 4 credits. Not offered 1990–91.  
F. Ahl.]

**[363 Representations of Women in Ancient Greece and Rome (also Women's Studies 363)]**

Fall. 4 credits. Not offered 1990–91.  
M W 2:30–3:45. L. S. Abel, J. Ginsburg.]

**480 Roman Society and Politics under the Julio-Claudians**

Spring. 4 credits.  
W 2:30–4:30. J. Ginsburg.

**English**

See, in the department's listing, "Courses Primarily for Nonmajors."

**Geological Sciences****101 Introductory Geological Sciences**

Fall, spring. 3 credits.  
2 lecs, 1 lab, field trips, evening exams in the fall term. Fall, W. B. Travers; spring, J. M. Bird.

This course teaches observation and understanding of the earth, including oceans, continents, coasts, rivers, valleys, glaciated regions, earthquakes, volcanoes, and mountains; theories of plate tectonics; the origin, discovery, and development of mineral and water resources. The lab teaches use of topographic and geologic maps and recognition of minerals and rocks and includes field trips to Cascadilla Gorge, Fall Creek, and Enfield Glen.

**102 Evolution of the Earth and Life**

Spring. 3 credits. Geological Sciences 101 recommended.  
2 lecs, 1 lab, field trips, weekly quizzes, no midterm. J. L. Cisne.

The story of the earth and life in terms of evolutionary processes and the global economy and material. The planet as a by-product of stars' evolution. Plate tectonics, continental drift, and their implications for life, fossil fuels, and climate. The greenhouse effect and its few-billion-year history. Evolution of life; human ancestry; dinosaurs. Lab: Examining the rocks and fossils that tell the story. Field trips to fossil-collecting sites and to Taughannock Gorge.

**103 Geology in the Field**

Fall. 3 credits. Limited to 35 students.  
1 lec, 1 field trip or lab, 1 rec.  
A. L. Bloom.

The subject matter of Geol 101, Introductory Geological Sciences, taught as much as possible by field trips in the campus and vicinity on foot and by bus. Weekly field trips until November introduce most of the major topics of the course, supplemented by lectures, recitations, and labs later in the term.

**104 Introduction to Oceanography**

Spring. 3 credits.  
2 lecs, 1 lab. W. M. White.  
The oceans remain one of the last frontiers for man, yet they affect our lives in many subtle ways. This course presents a survey of what is known of the physics, chemistry, geology, and biology of the oceans and is intended for both science and non-science majors. Topics include: sea-floor spreading and plate tectonics; geology and biology of mid-ocean ridges; biological and geological controls on the chemistry of seawater; ocean currents and circulation; the oceans and climate, including El Niño, the greenhouse effect, and the Ice Ages; ecology of open ocean, ocean bottom, and near-shore communities; coastal processes; marine pollution and waste disposal; mineral and biological resources of the sea; Law of the Sea. Presented at the level of *Scientific American*.

**111 To Know the Earth**

Fall. 3 credits.  
2 lecs, 1 lab, and field trips. J. E. Oliver.  
A course to acquaint the non-scientist with the earth. Geology as an intellectual challenge, a provider of resources, an environment, a danger, a base for culture, and a science among sciences. The story behind landscapes,

mountains, earthquakes, volcanoes, oceans, gold, petroleum, and icecaps. The record of the past, the context of the present, the forecast for the future.

**202 Environmental Geology**

Spring. 3 credits.  
2 lecs, 1 rec, lab or field trip. D. E. Karig.  
In-depth introduction to geologic processes that affect or are affected by human society, including stream behavior and floods, earthquakes, land stability and mass-wasting, and volcanic hazards. This material provides an application of geology to engineering, natural resources, and land-use planning. Local examples are discussed and visited on short field trips. The course can be taken as an introduction to geology, but also serves as a continuation to Geol 101.

**German Studies****283 Contemporary European Society and Politics (also History 283 and Government 343)**

Fall. 4 credits.  
T R 2:55–4:10. J. Pontusson, G. Waite, J. Weiss.

**320 Postwar German Novel**

Spring. 4 credits. Taught in English.  
T R 10:10–11:25. I. Ezerghailis.

**346 German Women Writers in Translation (also Women's Studies 346)**

Spring. 4 credits.  
T R 1:25–2:40. B. Martin.

**History of Art**

All 200-level courses and some 300-level courses. See department listing.

**Psychology****326 Evolution of Behavior**

Fall. 4 credits.  
T R 2:55–4:10. R. Johnston.

**418 Psychology of Music**

Spring. 3 or 4 credits.  
T R 1:25–2:40. C. Krumhansl.

**Russian Literature****[207 Readings from Russian Culture**

Fall. 4 credits. Not offered 1990–91.  
M W F 9:05. G. Shapiro.]

**[329 Eastern Europe Today: Economics, Government, Culture (also Economics 329 and Government 326)]**

Fall. 4 credits. Not offered 1990–91.  
T R 2:55–4:10. G. Gibian, M. Rush, G. Staller.]

**[350 Education and the Western Literary Tradition (also Comparative Literature 350 and College Scholar 350)]**

Spring. 4 credits. Not offered 1990–91.  
M W F 10:10. P. Carden.]

**367 The Russian Novel**

Fall. 4 credits.  
T R 2:55–4:10. G. Gibian.

**[373 Chekhov**

Fall. 4 credits. Not offered 1990–91.  
T R 11:40–12:55. S. Senderovich.]

## Sociology

### 101 Introduction to Sociology

Fall or spring. 3 credits.

MW 11:15–12:05 plus one section. Fall, S. Caldwell; spring, M. Hannan.

With a focus on public issues that might in any semester include collective violence, markets and organizations, and social policies aimed at lowering the rate of poverty, this course provides an introduction to theory and research in sociology and demonstrates how the insights and methods of sociological analysis can be brought to bear in understanding major issues of public life. The goal is to convey a sense of the interrelations between the formulation of theories about social behavior and the collection and analysis of data in order to evaluate those theories. Instead of simply describing research, this course provides "hands-on" experience in analyzing sociological problems. Students undertake guided research exercises that involve using computers to analyze actual data. No prior background is presumed; necessary skills are covered in class and section meetings.

### 104 Class, Race and Ethnicity

Spring. 3 credits.

TR 10:10–11:25. S. Olzak.

What is the relationship between race and social class? To what extent does discrimination produce barriers to achievement and attainment for African Americans, Hispanics, Asians, and other immigrants in American society? Why are some groups more likely to be the target of ethnic and racial hostility than others? This course uses sociological analyses to answer these questions about the nature of race, ethnicity, and social class in our society and others. This course is designed as an introduction to the sociology of inequality and is primarily for freshmen and sophomores.

### 106 Family and Work

Fall. 3 credits.

T 10:10–11:25, plus one section to be arranged. L. Smith-Lovin.

The events of the past 30 years have profoundly transformed arrangements governing love, work, and their routinization in households and employment. In this course, students will look at data from census and time use studies showing what has changed and what has remained relatively stable. Sociological theories that explain these trends will be examined. Students will have the opportunity to test their own ideas with analyses of data from a national survey. The impact of sociological ideas for public issues like child care, welfare policy, sex discrimination statutes, and comparable worth will be discussed. This course is primarily for freshmen and sophomores.

### 202 Writing in the Social Sciences (also Writing 202)

Fall or spring. 3 credits. Limited to 17 students each section. Prerequisite: one social sciences course.

Fall: TR 11:40–12:55; Spring: TR 10:10–11:25. K. Hjortshoj.

This course helps students write and read with more confidence and skill, especially in the social sciences. The course investigates the ways in which social scientists use language. How and why does their writing vary? How do their theories, objectives, methods, and audiences affect their writing? We will address these questions through discussion and writing about works by social scientists in various fields. Both discussion and writing will aim to

strengthen the composition skills that are important in academic work: analysis, comparison, and summary of texts; description and argument; handling of evidence, references, and quotations; and strategies for revision. Instruction will include frequent individual conferences on finished essays and work in progress. Students will write, and often revise, eight to ten papers—about 30 pages of finished work.

### 310 Sociology of War and Peace

Fall. 4 credits. Prerequisite: a course in sociology or government.

TR 1:25–2:40. R. M. Williams, Jr.

Every human group, community, or society presents many examples of altruism, helping, cooperation, agreement, and social harmony. Each grouping or society also manifests numerous examples of competition, rivalry, opposition, disagreement, conflict, and violence. Both conflict and cooperation are permanent and common aspects of the human condition. Collective conflicts, especially wars and revolutions, are frequent and dramatic events. But "peace" and "war" are equally active social processes, not passive happenings. This course describes various commonly accepted but erroneous notions of the causes and consequences of war and deterrence. It deals with the major theories concerning the sources of war in international and intranational social systems. The last half of the course analyzes the modes, techniques, and outcomes of efforts to restrict, regulate, and resolve international conflicts.

### 335 Industrial and Post-Industrial Society

Spring. 4 credits. Open to juniors and seniors in any department. No prerequisites.

TR 1:25–2:40. D. Weakliem.

Service and information based industries are steadily growing in all modern societies. Many people claim that this development fundamentally changes social structure, social conflict, politics, and culture. Others say that post-industrial society is just a continuation of industrial society. This course will explore issues concerning post-industrial society: for example, are traditional social categories such as class or religion giving way to new divisions? It will explore theories of post-industrial society and allow students to test them with data on recent changes in social conditions.

### [365 Comparative Perspectives on Socialist Societies and Economies

Fall. 3 credits. Open to juniors and seniors in any department. No prerequisites. Not offered 1990–91.

W 2:30–4:25. V. Nee.

This course focuses on analyzing the relationship between state, economy, and society in socialist societies. Particular attention is given to the tensions between planning and market, equality and equity, center and locality, bureaucratic domination and individual choice, and ideology and dissent. What are the problems in state-socialist societies and what are the dynamics and limits of reform movements? What are the areas of difference and convergence in the patterns of state, market, and household relations in capitalist and socialist societies? Readings will draw primarily on case studies of the Chinese, Eastern European, and Soviet experiences.]

## AKKADIAN

See Department of Near Eastern Studies.

## AMERICAN STUDIES

J. Porte (260 Goldwin Smith Hall, 255-8349), chair and director of undergraduate studies; S. Blumin, H. L. Gates, M. Kammen, D. McCall, R. L. Moore, R. Polenber, S. Samuels, F. Somkin, S. C. Strout (Emeritus)

### The Major

The major in American studies, appropriate for a wide variety of future vocations, is basically a program of coordinated study in the history and literature of the United States. It is not a "double major." The prerequisites are minimal: one course in European, British, or American history at the 100 or 200 level and one course in British or American literature at the 200 level. The major itself is structured and demanding, and students who expect to become American studies majors should apply to the chair to arrange for a major adviser.

In consultation with their advisers, American studies majors elect 32 credits (or eight courses) of work in the history and literature of all three large periods into which an account of the nation's development can be divided, defined for the purposes of the program as colonial, nineteenth century, and twentieth century. To gain both depth and breadth, they select as an area of concentration either a single period (or the connections between two of the periods) and take either 16 credits in one period and 8 credits in each of the other two, or 12 credits in each of the two periods whose connections constitute the focus of the study and 8 credits in the third. In addition, they take one of the adviser-approved interdisciplinary seminars at the 400 or 600 level. When the subject matter is appropriate, such a seminar may count toward the satisfaction of the period requirements. Students may divide the work between history and literature in whatever proportion serves their interests, provided that they take no more than two-thirds of their courses in any one department.

Beyond the basic requirements in American history and American literature, 12 credits above the elementary level are required in allied subjects. Eight credits of work are in the history or literature, or both, of another related culture; and 4 credits are in American thought, society, or culture studies from the perspective of another discipline such as anthropology, economics, government, history of art, or sociology. (This last 4-credit requirement may be satisfied outside the college.)

Courses in American history that will satisfy the 32-credit requirement described in the second paragraph are offered by the Department of History; those in American literature are offered by the Department of English, the Department of Theatre Arts, and the Africana Studies and Research Center. Occasionally a course that fits an individual student's program may be offered elsewhere. Substitution will depend on the adviser's approval. Advisers determine what courses count for the interdisciplinary seminar.

**Honors.** Candidates for honors must maintain an average of B+ in courses pertinent to the major. To be eligible for a degree with honors in American studies, a student must in the



senior year either write an honors essay for American Studies 493, Honors Essay Tutorial, or submit to the American Studies Committee three term papers written for courses in the major and take an oral examination in the declared area of special interest.

**465 Proseminar in American Studies (also English 465)**

Spring. 4 credits.

W 1:25–3:35. J. Porte and members of the American Studies Program.

Selected topics in American history, literature, the arts, and politics. Recommended for American Studies majors.

**493 Honors Essay Tutorial**

Fall or spring. Up to 4 credits each semester.

See J. Porte for appropriate advisers.

## ANTHROPOLOGY

A. T. Kirsch, chair; R. Ascher, J. Fajans, C. J. Greenhouse, D. J. Greenwood, J. S. Henderson, D. H. Holmberg, B. J. Isbell, B. Lambert, T. F. Lynch, K. S. March, C. Morris, P. S. Sangren, J. T. Siegel, M. F. Small, R. J. Smith

Anthropology is unique in that it takes humanity in its broadest sense as its subject matter. It is a discipline that stresses the world's cultural diversity by means of a comparative perspective. This means that anthropologists are interested in cultural differences in and among modern societies as well as cultural change over time. As we look ahead to the 21st century, anthropology prepares students to think globally about humankind as thinkers, actors, builders, and as living organisms in a complex and fragile ecosystem.

The three branches of anthropology are archaeology, biological anthropology, and sociocultural anthropology. Archaeologists collect and interpret the record of the past to extend our understanding of human history and social change. That record tells the story not only of "ancient" societies, but also of the rise of civilizations that were the direct forebears of the contemporary nations that we know today. Archaeology also tells the story of human origins, the invention of farming and settled life, the rise of complex social institutions and technologies, and the worldviews of the past, among other themes. Biological anthropologists consider human experience from the perspective of questions of evolution, anatomy, genetics, cognition, nutrition, disease, medicine, ecology, and primate studies, offering multiple approaches to the question of human beings' "humanness." Some essential human attributes (complex thinking and communication, social organization, among other things) are shared with other higher primates. Sociocultural anthropology, like archaeology, looks at the worlds humans make for themselves. Sociocultural anthropologists examine the diversity of behaviors, relationships, economies, political and legal orders, worldviews, logics, languages, symbols, myths, and religions—among the many other means human beings invent to create and reproduce social life around the world. Sociocultural anthropologists collect data primarily through ethnographic fieldwork, that is, months or years participating and observing in the societies they study.

Together, the three branches of the discipline offer an integrated approach to the immense diversity of human experience. Through its subject matter, theories, and methods, anthropology also offers students a chance to integrate the three divisions of the university: the humanities, social sciences, and natural sciences. Each branch of anthropology involves these three subject areas in different ways. For purposes of distribution requirements in the College of Arts and Sciences, courses in anthropology count toward the social science requirement.

The major is designed to offer students opportunities to study all three branches of anthropology, through courses on particular topics (e.g., agriculture, religion, or economics), on world areas, and on theoretical problems. The requirements for majors are outlined below. Within the major, students may design their own specialties in consultation with a faculty adviser. Specialties may be developed through any combination of 300- and 400-level courses in the department, independent study, courses in related fields, and honors work.

### The Distribution Requirement

The social science requirement is met by completing Anthropology 102 and any full course (3 or 4 credits) in categories III, IV, V, and VI from the listings below, or any two courses in those categories.

Students who qualify for advanced placement in biology (a score of 4 or 5) may satisfy the biological science distribution requirement by taking Anthropology 101.

The expressive arts requirement is met by completing any two of Anthropology 450, 451, 452, 453, or 455.

### The Major

- 1) Applicants for the major in anthropology must complete Anthropology 101 and 102. Preferably, these courses will be taken in the freshman or sophomore years.
- 2) Students who major in anthropology:
  - a) Take Anthropology 300, preferably no later than their sophomore year.
  - b) Take Anthropology 420, preferably in the fall term of their senior year.
  - c) Take at least one course at the 200 level or above in each of categories III, IV, V, and VI from the listing below.
  - d) Develop one or more areas of specialization within the discipline in consultation with his or her faculty adviser. Examples of such specializations include sociocultural anthropology, anthropological archaeology, theory and history, and biological anthropology.
  - e) Take a total of 32 credits of course work, in addition to Anthropology 300 and above the 100 level. Up to 8 credits of course work in cognate disciplines related to the student's specialization may be accepted for the major with the permission of the faculty adviser.
  - f) When appropriate, special provisions for meeting major requirements may be arranged with the faculty adviser's approval.

**Honors.** Anthropology majors interested in the honors program should consult the director of undergraduate studies before the beginning of their senior year and apply for admission to the program. Candidates for the degree of Bachelor of Arts with honors in anthropology must complete a thesis in the final term of the senior year. Students may enroll in Anthropology 491 or 492, Honors Thesis, after obtaining the consent of the Honors Committee. The decision to award honors and in what degree is based on the quality of the thesis and the student's overall record.

### Facilities

The anthropology laboratory contains a small statistical and reference library as well as basic drafting and photographic equipment. In addition, the department has a collection of archaeological and ethnological materials used in teaching and research.

### Special Programs

Specialized individual study programs are offered in Anthropology 497–498, Topics in Anthropology, open to a limited number of juniors and seniors who have obtained consent of the instructor. Undergraduates should also note that most 600-level courses are open to them if consent of the instructor is obtained.

The Department of Anthropology holds colloquia throughout the academic year. Faculty members from Cornell and other universities participate in discussions of current research and problems in anthropology. Students are encouraged to attend.

Anthropology majors have also established an anthropology club, which sponsors educational and social events in conjunction with graduate students and faculty in the department.

### I. Introductory Courses (Including Freshman Writing Seminars)

Note: For additional freshman writing seminars in anthropology, see "Freshman Writing Seminars" and the John S. Knight Writing Program's special brochure.

#### 101 Introduction to Anthropology: Biological Perspectives on the Evolution of Humankind

Fall. 3 credits.

M W 12:20 plus disc, F 9:05, 11:15, or 12:20. M. F. Small.

The evolution of humankind is explored through the fossil record, studies of the biological differences among current human populations, and a comparison with our closest relatives, the primates. This course investigates the roots of human biology and behavior with an evolutionary framework.

**102 Introduction to Anthropology: The Comparison of Cultures**

Spring. 3 credits.

M W 12:20 plus disc, F 11:15, 12:20, or 2:30. D. H. Holmberg.

An introduction to cultural anthropology through ethnographies, or the descriptive accounts of anthropologists. Through readings and lectures students acquaint themselves with a number of cultures from several parts of the world. The cultures range in form from those of small-scale tribal societies to those of state societies. Throughout the course we attempt to make sense of exotic cultures in their own terms. Attention is focused on variation in cultural patterns as they are expressed in social, economic, and ritual practices. In this encounter the principles of anthropology, as a comparative enterprise that poses distinct cultural systems in relief, will be developed. Fiction, films, and exercises supplement the formal anthropological materials.

**121 Encounters with Other Cultures**

Spring. 3 credits. Freshman writing seminar.

M W F 2:30. B. Lambert.

The main texts are novels and biographies that show how indigenous cultures have adapted to change and yet retained their identity and books by anthropologists that tell of their experiences as participants in other societies and as interpreters of other cultures (including American subcultures). There is an exploration of cultural symbolism through fantasy. Students discuss and write about ways of playing the outsider's role and about changes in the traveler's own outlook.

**II. Courses Intended Primarily for Majors****300 The Discipline of Anthropology**

Fall. 4 credits. Limited to, and required of, anthropology majors, who must take this course in their sophomore year or no later than the fall term of the junior year.

T R 1:25–2:40. A. T. Kirsch with the anthropology faculty.

The course is an overview of the field of anthropology; it provides a systematic treatment of the discipline, the concepts that are used, the persistent questions that are asked, the specializations within the field, and the shared goals and differing viewpoints. The course is intended to help majors plan their course work.

**420 Development of Anthropological Thought**

Spring. 4 credits.

T R 10:10–11:25. A. T. Kirsch.

An examination of the history and development of anthropological theory and practice. The course will focus on the differences and continuities among the various national and historical approaches that have come to be regarded as the schools of anthropology.

**491 Honors Thesis**

Fall. 4 credits. Prerequisite: consent of the Honors Committee. Intended for majors graduating in mid year.

Hours to be arranged. Staff.

Independent work under the close guidance of a faculty member selected by the student.

**492 Honors Thesis**

Spring. 4 credits. Prerequisite: consent of the Honors Committee.

Hours to be arranged. Staff.

Independent work under the close guidance of a faculty member selected by the student.

**495 Social Relations Seminar (also Sociology 497)**

Spring. 4 credits. Limited to seniors majoring in social relations.

R 2:30–4:30. A. T. Kirsch.

**497–498 Topics in Anthropology**

497, fall; 498, spring. Credit to be arranged.

Hours to be arranged. Staff.

Independent reading course in topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

**III. Archaeological Courses**

See also courses listed under Archaeology.

**203 Early People: The Archaeological and Fossil Record (also Archaeology 203)**

Fall. 3 credits.

T R 11:40–12:55. T. P. Volman.

A survey of the archaeological and fossil record of human evolution. Contributions by researchers from a variety of scientific disciplines are highlighted, as are the discoveries, personalities, and controversies that have enlivened the study of human evolution for more than a century. Critical evaluation of evidence and interpretations will be stressed. Demonstrations and films supplement the lectures.

**[216 Ancient Societies**

Fall. 3 credits (4 by arrangement with instructor). Not offered 1990–91.]

**[352 Interpretation of the Archaeological Record**

Fall. 4 credits. Not offered 1990–91.]

**354 The Peopling of America**

Fall. 4 credits.

T R 8:40–9:55. T. F. Lynch.

Prehistoric discovery of the New World, beginning with American Indian origins in Asia and ending with the largely unrecorded European medieval contact with North America. Major topics include crossing the Bering land bridge, big-game hunting and extinctions, postglacial adaptations to changing environments, diversified subsistence in the eastern woodlands, agricultural civilizations of the Midwest and Southwest, and Eskimo and Norse exploration and settlement across the Arctic and North Atlantic.

**355 Archaeology of Mexico and Central America**

Spring. 4 credits.

T R 1:25–2:40. J. S. Henderson.

A survey of the cultural history of ancient Mexico and Central America, emphasizing Aztec and Maya civilizations. The use of ethnographic and historical information to enrich archaeological interpretation is a general theme. Specific topics include the emergence of settled farming life, the rise of civilization and the state, and the development of mechanisms that linked the many societies in the region into a single sphere of interaction.

**356 The Archaeology of South America**

Spring. 4 credits.

T R 8:40–9:55. T. F. Lynch.

Origins and development of South American peoples, subsistence systems, cultures, and civilizations, with special attention to Peru, Bolivia, Chile, and Ecuador. Major topics include the question of the first inhabitants, the domestication of plants and animals, the rise of temple-based religions and great art styles, regional interaction, and the formation of militaristic polities and the Inca state.

**[358 Archaeological Research Methods (also Archaeology 358)**

Spring. 4 credits. Not offered 1990–91.]

**[361 Field Archaeology in South America (also Archaeology 361)**

Spring. 10 credits. Not offered 1990–91.]

**402 Archaeological Research Design (also Archaeology 402)**

Fall. 4 credits. Prerequisite: permission of instructor.

W 2:30–4:25. J. S. Henderson, T. P. Volman.

Archaeological practice demands careful definition of research objectives and appropriate strategies before excavation or other fieldwork begins. Critical information lies in the arrangement and associations of objects and structures; this context should be a basic concern of any field investigation, particularly when it is destroyed by excavation. The course relies on case studies to illustrate how surveys, excavations, and analytical techniques must be tailored to solving specific problems.

**[404 Approaches to Archaeology (also Archaeology 404)**

Fall. 4 credits. Not offered 1990–91.]

**435 Investigation of Andean Institutions: Archaeological Strategies**

Fall. 4 credits.

Hours to be arranged. C. Morris.

The role of archaeology in the study of major questions regarding native Andean societies. Topics of current interest will be approached by selecting specific written sources that are archaeologically pertinent. Ways will be explored of using archaeological Andean data to test and extend the written material. Past archaeological contributions to the understanding of Andean institutions will also be examined.

**493 Seminar in Archaeology: The Aztecs (also Archaeology 493)**

Fall. 4 credits.

R 1:25–3:20. J. S. Henderson.

Examines the Aztec empire as it was at the time of the European conquest of Mexico and examines the astonishingly rapid transformation of Aztec society from foraging bands into imperial city-dwellers. Theoretical emphasis is on integrating historical and archaeological data to reconstruct ancient societies.

**494 Seminar in Archaeology: The State (also Archaeology 494)**

Spring. 4 credits.

R 2:55–4:50. J. S. Henderson.

Examines the nature of complex societies and the ways that key institutions and organizational features of states and chiefdoms—kingship, chiefs, polity boundaries, economic spheres, markets, redistribution, palaces, stratification, ranking, occupational specialization—are reflected in the archaeological record.

**[496 Public Archaeology (also Archaeology 496)]**  
Spring. 4 credits. Not offered 1990-91.]

#### IV. Biological and Ecological Anthropology

**[208 Gender, Race, and Medical "Science" (also Africana Studies 208 and Women's Studies 208)]**  
Fall. 3 credits. Not offered 1990-91.]

**[214 Humankind: The Biological Background]**  
Spring. 3 credits (4 by arrangement with instructor). Not offered 1990-91.]

**[275 Human Biology and Evolution (also Biological Sciences 275 and Biology and Society 275)]**  
Fall. 3 or 4 credits (4 credits with discussion). S-U grades optional, with permission of instructor.

M W F 10:10, optional disc, day and time to be arranged. K. A. R. Kennedy, J. D. Haas.

An introduction to the biology of *Homo sapiens* through an examination of human evolution, biological diversity, and modes of adaptation to past and present environments. Evolutionary theory is reviewed in relation to the current evidence from the fossil record and studies of the evolution of human behavior. A survey of human adaptation covers a complex of biological and behavioral responses to environmental stress. Human diversity is examined as the product of long-term evolutionary forces and short-term adaptive responses. Topics such as creationism, the Piltdown fraud, the sociobiology debate, genetic engineering, race and IQ, and racism are presented as examples of current issues in human biology. These topics and others are the focus of the optional one-hour weekly discussions.

**[371 Human Paleontology (also Biological Sciences 371)]**  
Fall. 4 credits. Not offered 1990-91.]

**[390 Primate Behavior and Ecology]**  
Spring. 4 credits. Prerequisite: Anthropology 101 or permission of instructor. Limited to 25 students.

M W F 10:10. M. F. Small.

The course will investigate all aspects of nonhuman primate life. Based on the fundamentals of evolutionary theory, group and inter-individual behaviors will be presented. In addition, an understanding of group structure and breeding systems will be reached through an evaluation of ecological constraints imposed on primates in different habitats. Subjects include: primate taxonomy, diet and foraging, predation, cooperation and competition, social ontogeny, kinship, and mating strategies.

**[474 Laboratory and Field Methods in Human Biology (also Biological Sciences 474)]**

Spring. 4 credits. Prerequisite: one year of introductory biology or Anthropology 101 or permission of instructor. Offered alternate years.

Lecs, T R 10:10-12:05; additional lab hours to be arranged. Independent research project required.

K. A. R. Kennedy.

Practical exercises and demonstrations of modern approaches to the methodology of physical anthropology. Emphasis on comparative human anatomy, osteology, description of

skeletal and living subjects, paleopathology, skeletal maturation, and relevant field techniques for the archaeologist and forensic anthropologist. This course includes dissection of a profused nonhuman primate.

**[490 Primates and Evolution]**  
Spring. 4 credits. Prerequisite: Anthropology 390 or permission of instructor. Limited to 10 students.

M 7:30-9:30 p.m. M. F. Small.

This seminar will focus on one current controversy in primatology. Through readings and discussion the issues will be subject to critical evaluation. Current topics might include: social intelligence, primates as predators and prey, primate conversation, sexual selection theory, reproductive success, dominance, etc.

#### V. Sociocultural Anthropology

**[205 Ethnographic Films]**  
Fall or spring. 2 credits.

W 7:30-9:25 p.m. Staff.

Human cultural and social variability is explored through a series of ethnographic films, and readings and lectures relating to these films. The films are chosen to show peoples living in a variety of ecological situations and at different levels of social complexity in various parts of the world (i.e., Africa, Asia, Australia, the Americas). Readings and lectures will use the concepts and theories of cultural anthropology to interpret the significance of the different modes of life shown in the films.

**[211 Nature and Culture]**  
Spring. 3 credits (4 by arrangement with instructor).

M W F 9:05. Staff.

Cultural anthropology, because it encompasses the comparative study of man in society, provides a unique vantage on the nature of man. One of the focal questions of the discipline is the relationship between the physical/biological and symbolic/moral worlds in which we live. This inquiry places anthropology squarely at the center of social theory, since all social theories and political ideologies are founded on premises regarding human nature. Through study of a variety of issues and debates (e.g., "sociobiology," the origin and meaning of the incest tabu), this course examines a variety of past and current attempts to explain the relationships between nature and culture in human life.

**[212 Social Anthropology]**  
Fall. 3 credits (4 by arrangement with instructor). Not offered 1990-91.]

**[305 Emotion, Cognition, and Culture (also Women's Studies 305)]**  
Fall. 4 credits. Not offered 1990-91.]

**[306 Ethnographic Description]**  
Spring. 4 credits. Not offered 1990-91.]

**[313 Anthropology of the City]**  
Spring. 4 credits.

T R 10:10-11:25. R. J. Smith.

An examination of the sociocultural structure and process in urban settings, with emphasis on the role of rural migrants, the relationship of urbanism to political and economic development, the role of voluntary associations, and the adjustment of family and kinship groups to urban life. Asian, African, and Latin American urban centers are emphasized.

**[314 Applied Anthropology]**  
Fall. 4 credits. Not offered 1990-91.]

**[321 Sex and Gender in Cross-Cultural Perspective (also Women's Studies 321)]**  
Fall. 4 credits.

M F 12:20 plus disc, W 9:05, 10:10, 11:15, 12:20, 1:25, 2:15. K. S. March.

An introduction to the study of sex roles cross-culturally and to anthropological theories of sex and gender. The course examines various aspects of the place of the sexes in social, political, economic, ideological, and biological systems to emphasize the diversity in gender and sex-role definition around the world.

**[322 Magic, Myth, Science, and Religion]**  
Spring. 4 credits. Not offered 1990-91.]

**[323 Kinship and Social Organization]**  
Spring. 4 credits.

M W F 11:15. B. Lambert.

The course begins with a discussion of the evidence for the prehistory of the family. It then examines forms of the family, descent groups, and marriage systems and the role that age and gender play in social structures. The last part is devoted to a history of the British and American family and its fate in utopian communes.

**[326 Economic Anthropology]**  
Fall. 4 credits. Not offered 1990-91.]

**[328 Law and Culture]**  
Spring. 4 credits. Not offered 1990-91.]

**[329 Power and Culture]**  
Spring. 4 credits. Not offered 1990-91.]

**[406 The Culture of Lives (also Women's Studies 406)]**  
Spring. 4 credits.

R 1:25-3:20. K. S. March.

This seminar will look at persons, lives, cultures, and methods in anthropological life history materials. Throughout the seminar we will attend to the evolution of interest in, forms of, and uses for life history materials in anthropology, with special attention to differences in men's and women's lives and life (re)presentations.

**[408 Gender Symbolism (also Women's Studies 408)]**  
Spring. 4 credits.

T 12:20-2:15. K. S. March

This seminar explores the propositions that gender is (1) not a collage of cultural universals, but nevertheless is elemental to the construction of culture, and (2) is not simply or transparently about the sexes, but still is integral to the construction of self and society. We will look at various cultures of gender, the processes and concomitants of their formation, and the place of the people who live and believe in them. In particular we will try to look beyond Western constructions of mutually exclusive, hierarchically related, and universally applied gender.

**412 Contemporary Anthropological Theory**

Fall. 4 credits.

M W F 11:15. B. Lambert.

A survey of the assumptions anthropologists make concerning the nature of society and culture, and the explanations they have proposed for social behavior, values, belief systems, and ritual. Problems of social continuity and change will be addressed by way of theories of process, conflict, and transaction. Problems of cross-cultural understanding will be explored through interpretative and structural studies of symbolism, ritual, mythology, concepts of the person, and cultural logic. Examples will be drawn from Western and non-Western societies, past and present.

**[414 Anthropology and History]**

Spring. 4 credits. Not offered 1990-91.]

**424 Myth, Ritual, and Sign**

Fall. 4 credits.

T R 10:10-11:25. J. T. Siegel.

We will treat myth, ritual, and sign in their theoretical and practical dimensions, looking at them in the views of various social theorists and as described by ethnographers.

**426 Ideology and Social Reproduction**

Spring. 4 credits.

M 7:30-9:30 p.m. P. S. Sangren.

What is the logic of the process that links culture and social institutions? Why do all cultural systems (including "science") embody an element of logical circularity or delusion? How do theories of society, economy, and nature relate to values, authority, power, and legitimacy? Anthropology's comparative perspective on these questions is the focus of this course. Students will read and evaluate analyses of both familiar and exotic societies that focus on the dialectical relationship between ideas and institutions. The course will maintain a critical perspective toward contending theoretical positions (e.g., structuralist, Marxist, deconstructive) and encourage attention to the ideological dimensions of critical theory itself.

**[427 The Anthropology of Everyday Life]**

Fall. 4 credits. Not offered 1990-91.]

**428 Spirit Possession, Shamanism, Curing, and Witchcraft (also Women's Studies 428)**

Spring. 4 credits. Prerequisite: background in anthropology or women's studies. Enrollment limited.

T 8:40-10:40. D. H. Holmberg.

An anthropological consideration of witchcrafts, shamanism, curing, and cults of spirit possession with special attention to the play of gender. Classic anthropological accounts of non-Western societies will be considered along with ethnographic and historical accounts of Western societies. The course also addresses general problems in the study of women and gender and the anthropology of myth, ritual, and symbolism.

**[434 Anthropology and Colonialism]**

Spring. 4 credits. Not offered 1990-91.]

**[450 Seminar on Ethnographic Film (also Theatre Arts 450)]**

Spring. 4 credits. Not offered 1990-91.]

**[451 Anthropological Boundaries]**

Fall. 4 credits. Not offered 1990-91.]

**[452 Portraits, Profiles, and Life Histories]**

Spring. 4 credits. Not offered 1990-91.]

**453 Visual Anthropology**

Fall. 4 credits. Enrollment limited by appropriate space for showing work. S-U grades only.

T 10:10-12:35. R. Ascher.

The expression of ideas about the human condition through original drawings, graphics, paintings, photographs, cinema, sculpture, and video that take the person as subject. Writing can be combined with visual expression, as, for example, in concrete poetry or photographic essays. Projects must conform to two general guidelines: (1) the student must have prior knowledge of the medium chosen or concurrent course work in it, and (2) the project must be one that can be developed throughout the course and benefit from its particular setting. In the first half, the creative work of others is studied. For example, we read Spiegelman's MAUS and view films made by both anthropologists and the people whom they visit. The second half is devoted to hour-long progress reports and discussions of the work of people in the course.

**[455 Theatre of Anthropology]**

Spring. 4 credits. Not offered 1990-91.]

**[480 Toward an Anthropology of the Female Body (also Women's Studies 480)]**

Spring. 4 credits. Not offered 1990-91.]

**VI. Area Courses****230 Cultures of Native North America**

Fall. 4 credits.

M W F 2:30. B. Lambert.

A survey of the principal Eskimo and American Indian culture areas north of Mexico. Selected cultures will be examined to bring out distinctive features of the economy, social organization, religion, and worldview. Although the course concentrates on traditional cultures, some lectures and readings deal with changes in native ways of life that have occurred during the period of European-Indian contact.

**[331 The United States]**

Spring. 4 credits. Not offered 1990-91.]

**[333 Ethnology of the Andean Region]**

Spring. 4 credits. Not offered 1990-91.]

**[335 Peoples and Cultures of Mainland Southeast Asia]**

Fall. 4 credits. Not offered 1990-91.]

**[336 Peoples and Cultures of the Pacific]**

Fall. 4 credits. Not offered 1990-91.]

**339 Peoples and Cultures of the Himalayas**

Fall. 4 credits.

M W F 3:35. K. S. March.

A comprehensive exploration of the peoples and cultures of the Himalayas. Ethnographic materials draw on the lifeways of populations living in the Himalayan regions of Bhutan, India, Nepal, and Tibet. Some of the cultural issues to be examined through these sources include images of the Himalayas in the West, forms of social life, ethnic diversity, political and economic history, and religious complexity.

**[342 Cultures and Societies of India, Nepal, and Sri Lanka]**

Fall. 4 credits. Not offered 1990-91.]

**[343 Religion, Family, and Community in China]**

Fall. 4 credits. Not offered 1990-91.]

**345 Japanese Society**

Fall. 4 credits.

T R 10:10-11:25. R. J. Smith.

A survey of the social structure of Japan and a discussion of trends in urban and rural life during the past century. Topics to be emphasized include the family, ancestor worship, community and social organization, and urbanism and modernization.

**[433 Andean Thought and Culture]**

Spring. 4 credits. Not offered 1990-91.]

**[443 Religion and Ritual in Chinese Society]**

Fall. 4 credits. Not offered 1990-91.]

**[456 Mesoamerican Religion, Science, and History]**

Fall. 4 credits. Not offered 1990-91.]

**477 Ethnology of Island Southeast Asia**

Spring. 4 credits.

T R 10:10-11:25. J. T. Siegel.

Peoples and cultures of Indonesia and the Philippines will be discussed, focusing on politics in its linguistic dimensions, as well as economic and cultural processes.

**VII. Graduate Seminars**

600-level courses are open to undergraduates who have fulfilled the prerequisites or by consent of the instructor.

**601-602 The Teaching of Anthropology**

601, fall; 602, spring. 2 credits. Enrollment limited. Letter grade only.

Hours to be arranged. D. H. Holmberg, M. F. Small.

This seminar is designed for graduate teaching assistants in Anthropology 101 and 102. The pedagogical goals and techniques for labs and sections are discussed at length. The fall term class is taught in conjunction with Anthropology 101 and is directed toward teaching of biological anthropology. The spring term class is taught in conjunction with Anthropology 102 and is directed toward issues in the teaching of sociocultural anthropology.

**Southeast Asia Seminar: Burma (Asian Studies 601)****Southeast Asia Seminar: Philippines (Asian Studies 602)****[603 Production, Exchange and Value]**

Fall. 4 credits. Not offered 1990-91.]

**Contemporary Sociological Theories of Development (Rural Sociology 606)****607-608 Special Problems in Anthropology**

607, fall; 608, spring. Credit to be arranged. Hours to be arranged. Staff.

**610 Language of Myth (also Classics 610 and Comparative Literature 615)**

Spring. 4 credits.

T 1:25-4:25. J. T. Siegel, P. Pucci.

An analysis of the theories on language leading to Levi-Strauss and Derrida. Myth and the notion of "the father."

**[612 History of Anthropological Thought]**

Spring. 4 credits. Not offered 1990-91.]

**Methods of Assessing Physical Growth in Children (Nutritional Sciences 612)**



**614 Reading Ethnography**

Spring. 4 credits.

R 1:30–3:30. D. H. Holmberg.

This seminar concentrates on reading representative ethnographic texts, particularly those by anthropologists who have played focal roles in the development of anthropological theory. On the one hand, the course is designed for students to read systematically some of the "classics" of ethnography and on the other to raise questions about ethnography as a discipline and the close and necessary relation of ethnography to theory in anthropology.

**[616 The Cultural Production of the Person]**

Spring. Not offered 1990–91.]

**[619 Anthropological Approaches to the Study of Buddhism in Asia]**

Fall. 4 credits. Not offered 1990–91.]

**[623 Himalayan Issues, Problems, and Prospects]**

Spring. Credit to be arranged. Not offered 1990–91.]

**[626 Problems in Economic Anthropology]**

Fall. 4 credits. Not offered 1990–91.]

**[627 The Anthropology of Law (also Law 702)]**

Fall. 4 credits. Not offered 1990–91.]

**628 Political Anthropology**

Fall. 4 credits.

W 2:30–4:30. J. T. Siegel.

A comparison of political rhetoric in the Indonesian Old and New Orders. The bearing of such phenomena as newspapers, magazines, television, and various types of theater, music, and fiction, on the shaping of accommodation or opposition to the political order will be examined. A reading knowledge of Indonesian is required.

**Anthropometry and Body Composition (Nutritional Sciences 630)**

**[631 Kingship and Cultural Identity in Mesoamerica: Interpretive and Comparative Issues]**

Fall. 4 credits. Not offered 1990–91.]

**[632 Andean Symbolism]**

Spring. 4 credits. Not offered 1990–91.]

**633 Andean Research**

Fall or spring. 4 credits.

Hours to be arranged. B. J. Isbell, C. Morris.

**634–635 Southeast Asia: Readings in Special Problems**

634, fall; 635, spring. Credit to be arranged. Hours to be arranged. Staff.

**[636 Cognition and Classification]**

Fall. 4 credits. Not offered 1990–91.]

**640–641 South Asia: Readings in Special Problems**

640, fall; 641, spring. Credits to be arranged. Hours to be arranged. D. H. Holmberg, K. S. March.

Selected readings in society, religion, and culture in South Asia.

**645 Japanese Ethnology**

Spring. 4 credits.

Hours to be arranged. R. J. Smith.

This seminar is designed for advanced students who plan to conduct social science research in Japan. It deals with questions of historical continuity the relationship of the individual to

society, and the nature of contemporary Japanese social organizations. A reading knowledge of Japanese is strongly recommended.

**[651 Anthropological Boundaries: Seminar on Film]**

Spring. 4 credits. Not offered 1990–91.]

**653 Myth onto Film (also Theatre Arts 653)**

Fall and spring. 4 credits. Open to undergraduates and graduate students with permission of instructor. Enrollment limited by available studio space and equipment. Prerequisite: some knowledge of one of the following: anthropology, filmmaking, mythology, graphics, drawing, or painting. T 2–4:25. R. Ascher.

In myths, whales fly, pebbles throw themselves across streams, and trees are transformed into women. Toward the end of visualizing myths—in particular the myths of other people—we explore the possibilities of animated film. The technique used is cameraless animation; that is, we draw and paint, frame by frame, directly onto movie film. The intellectual problem is to visualize the myths of others so that they are comprehensible to us but are not thought to be of us. Reading includes introductory works on both myth and animation and there is background reading on the particular myth that is committed to film.

**[656 Maya History]**

Fall. 4 credits. Not offered 1990–91.]

**663 Hunters, Gatherers, and the Origins Of American Agriculture**

Spring. 4 credits. Prerequisite: Anthropology 356. Open to qualified undergraduates.

W 12:20–2:15. T. F. Lynch.

The transition from hunting and gathering to agricultural subsistence, with particular attention to demographic, ecological, and coevolutionary factors. Topics to be emphasized are the history of thought on agricultural origins, archaeological evidence bearing on these theories, contrasts and conflicts between Western and non-Western systems, and the effects of agricultural instability and environmental degradation, particularly in the Americas.

**664 Problems in Archaeology: "Early Man" in America**

Fall. 4 credits. Open to qualified undergraduates. Prerequisite: Anthropology 354.

W 12:20–2:15. T. F. Lynch.

The peopling of the Western Hemisphere will be considered in historical perspective, as it has been dealt with by archaeologists, geologists, and paleoecologists. Emphasis will be on contextual analysis and environmental adaptations, as well as chronology, with topics drawn from both North and South American archaeology.

**673 Human Evolution: Concepts, History and Theory (also Biological Sciences 673)**

Fall. 3 credits. Prerequisite: one year of introductory biology, Anthropology 101, or permission of instructor. Offered alternate years.

Sem, W 7:30–9:30 p.m.; additional hours to be arranged. K. A. R. Kennedy.

The historical background of present-day concepts of man's evolutionary variations and adaptations in space and time is surveyed. The formation of biological anthropology as an area of scientific inquiry within the social and

biological sciences is reviewed. Students select their own topics within a broad range of readings in the history of Western concepts of human origins, diversity, and place in nature.

**Design and Data Analysis in Development Research (Rural Sociology 715)**

**Social Movements in Agrarian Society (Rural Sociology 723)**

ARABIC AND ARAMAIC

See Department of Near Eastern Studies.

ARCHAEOLOGY

A. L. Bloom (geological sciences), R. G. Calkins (history of art), K. M. Clinton (Classics), J. E. Coleman (Classics), R. T. Farrell (English), J. S. Henderson (anthropology), P. I. Kuniholm (history of art), T. F. Lynch (anthropology), D. I. Owen (Near Eastern Studies), A. Ramage (history of art), B. S. Strauss (history), T. P. Volman (archaeology; director of undergraduate studies), J. Whitehead (Classics)

Archaeology is an interdisciplinary field at Cornell, which is one of the few universities in the United States to offer a separate archaeology major. Program faculty members, affiliated with several departments, coordinate course offerings and help students identify opportunities for fieldwork, graduate study, and professional positions.

The Major

The basic introductory course for both majors and nonmajors is Archaeology 100. This course covers the broadest range of archaeology in terms of area and time and deals with method as well as results. Those with a fairly serious interest, particularly prospective majors, are encouraged to take the optional one-hour section, Archaeology 101, which provides practical experience with archaeological materials. Archaeology 402, which considers research design, and Archaeology 404, which examines interpretive frameworks, are especially recommended for majors.

Since the major draws on the teaching and research interests of faculty from many departments in order to present a broad view of the archaeological process, a student interested in the archaeology major should discuss his or her course of study with a participating faculty member as early as possible. In some areas of specialization, intensive language training should be coordinated with other studies as early as the freshman year.

As prerequisite to the major a student must complete Archaeology 100. Once admitted to the major, the student must take an additional 36 credits in courses from the archaeology list, chosen in consultation with the major adviser. These courses should provide exposure to a broad range of archaeologically known cultures and the methods of revealing and interpreting them. They must be distributed as follows:

- 1) At least two courses from each of the categories below (totaling at least 30 credits, including 16 at the 300 level or above):

Theory and Interdisciplinary Approaches (B)

Old World Archaeology (C)

New World Archaeology (D)

- 2) At least two related courses (list available in Archaeology Program office)

**Honors.** Honors in archaeology is awarded on the basis of the quality of an honors essay and the student's overall academic record. Prospective honors students should have a 3.5 grade point in the major and a 3.0 grade point overall. They should consult with the director of undergraduate studies before the beginning of the senior year. The honors essay is normally prepared in consultation with a faculty adviser during the senior year; students may enroll in Archaeology 481, fall; 482, spring for this purpose.

**Fieldwork.** Every student should gain some practical experience in archaeological fieldwork on a project authorized by his or her adviser. This requirement may be waived in exceptional circumstances. The Jacob and Hedwig Hirsch bequest provides support for a limited number of students to work at excavations sponsored by Cornell and other approved institutions.

## The Concentration

Students in Cornell schools and colleges other than Arts and Sciences may elect a concentration in archaeology. To concentrate in archaeology, the student must complete Archaeology 100 with a grade of C or better and at least four advanced courses in archaeology, distributed among the three groups stipulated in (1) in the description of the major above. Concentrators are eligible for Hirsch Scholarships in support of fieldwork.

## Freshman Writing Seminars

For course descriptions, see the freshman writing seminar brochure.

## A. Introductory Courses and Independent Study Courses

### 100 Introduction to Archaeology

Spring. 3 credits.

M W F 1:25. 2 evening prelims.

T. P. Volman.

A broad introduction to archaeology—the study of material remains to answer questions about the human past. The history, methods, and interpretive frameworks of archaeology are presented, followed by a survey of the archaeological record from human origins, through the development of food production, to the rise and spread of civilizations. Guest lectures by members of the Cornell Archaeology Program are an integral part of the course.

### 101 Introduction to Archaeology, Section Spring. 1 credit. Limited to 35 students.

Optional section to be taken concurrently with Archaeology 100. Prospective archaeology majors are encouraged to participate in this section, although it is open to all interested students.

R 11:40. T. P. Volman.

A series of practical and special topics. The section includes analysis of archaeological materials, demonstrations, and visits to campus facilities.

### 300 Individual Study in Archaeology and Related Fields

Fall or spring. Credit to be arranged. Prerequisite: Archaeology 100 or permission of instructor.

Hours to be arranged. Staff.

Students pursue topics of particular interest with the guidance of a faculty member.

### 481-482 Honors Thesis

481, fall; 482, spring. 4 credits. Prerequisite: admission to Honors Program.

Hours to be arranged. Staff.

The student, under faculty direction, will prepare a senior thesis.

### 600 Special Topics in Archaeology

Fall and spring. 4 (V) credits.

Hours to be arranged. Staff.

Students pursue advanced topics of particular interest under the guidance of a faculty member(s).

### 681-682 Master's Thesis

681, fall; 682, spring. 4 (V) credits. Limited to students admitted to Master's Program in Archaeology.

Students, working individually with faculty member(s), prepare a Master's Thesis in Archaeology.

## B. Theory and Interdisciplinary Approaches

### 203 Early People: The Archaeological and Fossil Record (also Anthropology 203)

Fall. 3 credits.

TR 11:40. T. P. Volman.

A survey of the archaeological and fossil record of human evolution. Contributions by researchers from a variety of disciplines are highlighted, as are the discoveries, personalities, and controversies that have enlivened the study of human evolution for more than a century. Critical evaluation of evidence and interpretations will be stressed. Demonstrations and films supplement the lectures.

### 285 Art, Isotopes, and Analysis (also MSE 285, Engineering 185, Physics 200, English 285, and Art 372)

Spring. 3 credits.

J. W. Mayer.

The course will be based primarily on the analysis of paintings and rare books and the physical concepts underlying modern and analytical techniques. Each week a work of art will be described to include the historical and technical aspects of its creation and its modern analysis. Visual, infrared, and x-ray examination provide insight into the physical properties. Pigments are identified by the radiation emitted in electronic geographical origin of a particular pigment as well as by a dating method. The same analytical techniques are also discussed from the viewpoint of archaeological investigations.

### 308 Dendrochronology of the Aegean (also History of Art 309 and Classics 309)

Fall or spring. 4 credits. Limited to 10 students. Prerequisites: Archaeology 100 or Classics 220, and permission of instructor.

M 12:20 plus 2 labs. P. I. Kuniholm.

Participation in a research project of dating modern and ancient tree-ring samples from the Aegean and Mediterranean. Supervised reading and laboratory work. A possibility exists for summer fieldwork in Greece or Turkey.

### [317 Stone Age Archaeology

Fall. 4 credits. Not offered 1990-91.

T. P. Volman.

A survey of current approaches to the archaeological record of Stone Age peoples, from the earliest sites to those of recent times. Case studies are used to illustrate the nature of archaeological occurrences, excavation procedures, and analytical methods. Multidisciplinary efforts to expand our knowledge of prehistoric lifeways and behaviors are a major concern of the course.]

### [356 Practical Archaeology (also Classics 356)

Spring. 4 credits. Prerequisite: one course in archaeology. Not offered 1990-91.

J. Coleman.]

### [358 Archaeological Research Methods (also Anthropology 358)

Not offered 1990-91.]

### 402 Archaeological Research Design (also Anthropology 402)

Fall. 4 credits. Prerequisite: permission of instructor.

W 2:30-4:25. J. S. Henderson,

T. P. Volman.

Archaeological practice demands careful definition of research objectives and appropriate strategies before excavation or other fieldwork begins. Critical information lies in the arrangement and associations of objects and structures; this context should be a basic concern of any field investigation, particularly when it is destroyed by excavation. The course relies on case studies to illustrate how surveys, excavations, and analytical techniques must be tailored to solving specific problems. A seminar especially recommended for undergraduate majors and graduate archaeologists but open to anyone with a serious interest in archaeology.

### [404 Approaches to Archaeology (also Anthropology 404)

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

J. S. Henderson, T. P. Volman.

An exploration of the concepts that have shaped modern archaeology. The course briefly examines the history of theoretical orientations in archaeology, then considers the variety of perspectives and interpretive frameworks that guide present-day investigations. Case studies illustrate the implications of the nature of the archaeological record for reconstructing subsistence and economic systems, trade, social and political organization, demography, and ideology. An undergraduate seminar especially recommended for undergraduate majors and graduate archaeologists but open to anyone with a serious interest in archaeology.]

**493 Seminar in Archaeology: The Aztecs (also Anthropology 493)**

Fall. 4 credits.

R 1:25-3:20. J. S. Henderson.

Examines the Aztec empire as it was at the time of the European conquest of Mexico and examines the astonishingly rapid transformation of Aztec society from foraging bands into imperial city-dwellers. Theoretical emphasis is on integrating historical and archaeological data to reconstruct ancient societies.

**494 Seminar in Archaeology: The State (also Anthropology 494)**

Spring. 4 credits.

R 2:55-4:50. J. S. Henderson.

Examines the nature of complex societies and the ways that key institutions and organizational features of states and chiefdoms—kingship, chiefs, polity boundaries, economic spheres, markets, redistribution, palaces, stratification, ranking, occupational specialization—are reflected in the archaeological record.

**[496 Public Archaeology (also Anthropology 496)]**

4 credits. Not offered 1990-91.]

**Investigations of Andean Institutions: Archaeological Strategy (Anthropology 435)**

Fall. 4 credits.

C. Morris.

**Hunters, Gatherers, and the Origins of American Agriculture (Anthropology 663)**

Spring. 4 credits. Prerequisite: Anthropology 356. Open to qualified undergraduates.

W 12:20-2:15. T. F. Lynch.

The transition from hunting and gathering to agricultural subsistence, with particular attention to demographic, ecological, and coevolutionary factors. Topics to be emphasized are the history of thought on agricultural origins, archaeological evidence bearing on these theories, contrasts and conflicts between Western and non-Western systems, and the effects of agricultural instability and environmental degradation, particularly in the Americas.

**Problems in Archaeology: "Early Man" in America (Anthropology 664)**

Fall. 4 credits. Prerequisite: Anthropology 354. Open to qualified undergraduates.

W 12:20-2:15. T. F. Lynch.

The peopling of the Western Hemisphere will be considered in historical perspective, as it has been dealt with by archaeologists, geologists, and paleoecologists. Emphasis will be on contextual analysis and environmental adaptations, as well as chronology, with topics drawn from both North and South American archaeology.

**Geomorphology (Geological Sciences 441)**

Fall. 3 credits. Prerequisites: Geological Sciences 102 or 201, or permission of instructor.

2 Lects, 1 lab. A. L. Bloom.

Systematic analysis of landforms constructed by tectonic and volcanic processes and their subsequent progressive destruction by climate-controlled erosional processes.

**[Glacial and Quaternary Geology (Geological Sciences 442)]**

Spring. 3 credits. Prerequisite: Geological Sciences 441 or permission of instructor. Offered alternate years. Not offered 1990-91.

A. L. Bloom.]

**[Methodology Seminar II (History of Art 595)]**

Spring. 4 credits. Not offered 1990-91.

R. G. Calkins.]

**C. Old World Archaeology**

**Initiation to Roman Culture: Roman and Anti-Rome (Classics 218)**

Spring. 4 credits.

M W F 10:10; plus one hour to be arranged. J. Whitehead, F. Ahl.

In this course two professors, an archaeologist and a literary critic, give an overview of the Roman Empire, and of modern attitudes to it, by discussing selected places, themes, and works of art and literature. We start with visual images, the amphitheater, for example, and consider not only their importance as cultural and artistic statements, but how they come to symbolize in literature and religious controversy the magnificence and decadence of Roman power. Similarly, we examine the poetry and official monuments (Trajan's column and the great triumphal arches). Other topics include Roman attitudes to non-Romans, daily life and domestic art as seen in the ruins of Pompeii and Herculaneum, and the literature and art of political and religious dissent.

**221 Minoan-Mycenaean Art and Archaeology (also History of Art 221 and Classics 221)**

Fall. 3 credits. Students may not obtain credit for both this course and Classics 319.

M W F 10:10. P. I. Kuniholm.

The birth of civilization in Greece and the Aegean Islands during the Bronze Age. The main focus is on the rise and fall of Minoan Crete and Mycenaean Greece, with consideration given to the nature and significance of Aegean interactions with Egypt, the Near East, and Anatolia.

**[233 Archaeology in Action II (also Classics 233)]**

Spring. 3 credits. Prerequisites: Archaeology 100 or Classics 220, and permission of instructor. Not offered 1990-91.

P. I. Kuniholm.]

**Greek and Roman Mystery Cults and Early Christianity (Classics 239)**

Spring. 3 credits. Prerequisite: Classics 237 or permission of instructor.

K. Clinton.

A study of the controversial question of religious continuity between paganism and early Christianity. After a brief survey of Classical mystery cults and Hellenistic religion, the course will focus on such Hellenistic cults as the mystery cults of Isis, Bacchus, and Attis and the Great Mother and on the distinctive features that contributed to their success. Discussion of Christian liturgy and beliefs both in the East and the West to determine what Christianity owed to its pagan predecessors and to isolate the factors that contributed to its triumph over the "rival" pagan cults of late antiquity.

**[250 Etruscan Art and Archaeology (also Classics 250 and History of Art 223)]**

Fall. 3 credits. Not offered 1990-91.

J. Whitehead.]

**[267 Mediterranean Archaeology (also Near Eastern Studies 267 and Classics 219)]**

Fall. 3 credits.

D. I. Owen.]

**[275 Ancient Seafaring (also Near Eastern Studies 261)]**

Fall. 3 credits. Not offered 1990-91.

D. I. Owen.]

**[406 The Archaeology of Early Christian England and Ireland (also English 406)]**

Spring. 4 credits. Not offered 1990-91.

R. T. Farrell.]

**[413 Sutton Hoo: Past, Present, and Future (also English 413/603)]**

4 credits. Spring. Not offered 1990-91.

R. T. Farrell.]

**[423 Ceramics (also History of Art 423 and Classics 423)]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

A. Ramage.]

**[434 The Rise of Classical Greece (also Classics 434 and History of Art 434)]**

Spring. 4 credits. Prerequisite: Classics 220 or 221 or History of Art 220 or 221 preferred. Not offered 1990-91.

P. I. Kuniholm.]

**[Minoan-Mycenaean Archaeology (Classics 319)]**

Spring. 4 credits. Prerequisite: participants are expected already to have completed some course work in Mediterranean or classical archaeology (e.g., Classics 219/Near Eastern Studies 267 or Classics/History of Art 220). Students may not obtain credit for both this course and Archaeology/Classics/History of Art 221. Not offered 1990-91.

J. Coleman.]

**[Arts and Monuments of Athens (Classics 320 and History of Art 320)]**

Spring. 4 credits. Prerequisite: Classics 220 or permission of instructor. Not offered 1990-91.]

**[Greeks and Their Neighbors (Classics 322 and History of Art 328)]**

Fall. 4 credits. Prerequisite: Classics/History of Art 328; Classics/History of Art 220 or Classics/History of Art 221, or permission of instructor. Not offered 1990-91.

J. Coleman.]

**[Seminar on Roman Art (Classics 435 and History of Art 427)]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

J. Whitehead.]

**[Graduate Seminar in Bronze Age Archaeology (Classics 629)]**

Fall. Not offered 1990-91.

J. Coleman.]

**[Seminar in Classical Greek Archaeology: Graduate (Classics 630)]**

Fall. 4 credits. Not offered 1990-91.]

**[Ancient Greece from Homer to Alexander the Great (History 285)]**

Fall. 4 credits. Open to freshmen. Not offered 1990-91.

B. Strauss.]

**Ancient Rome from Republic to Holy City (History 268)**

Spring. 4 credits.

T R 10:10-11:25. B. Strauss.

**Introduction to Art History: The Art of the Classical World (History of Art 220 and Classics 220)**

Spring. 3 credits.

M W F 10:10. A. Ramage.

The sculpture, vase painting, and architecture of the ancient Greeks, from the Geometric period through the Hellenistic, and the art of the Romans from the early republic to the late empire.

**Introduction to Art History: Monuments of Medieval Art (History of Art 230)**

Spring. 3 credits.

M W F 12:20. R. G. Calkins.

An introduction to the approaches to art history through a study of selected works of art from the Middle Ages: architecture, sculpture, painting, manuscript illumination, metal work, and ivory.

**Arts of the Roman Empire (Classics 350 and History of Art 322)**

Fall. 4 credits. Prerequisite: History of Art 220 or permission of instructor.

T R 10:10–11:25. J. Whitehead.

The visual arts in the service of the first world state. The course starts with the Etruscan and Republican period but concentrates on monuments of the Imperial era in Italy and the provinces until the time of Constantine.

**[Greek Vase Painting (History of Art 325 and Classics 325)]**

Spring. 4 credits. Prerequisite: previous enrollment in a History of Art or Classics course or permission of instructor. Not offered 1990–91.

A. Ramage.]

**[Greek and Roman Coins (History of Art 327 and Classics 327)]**

Fall. 4 credits. Prerequisite: History of Art 220 or permission of instructor. Not offered 1990–91.

A. Ramage.]

**[Architecture of the Middle Ages (History of Art 332 and Architecture 382)]**

Fall. 4 credits. Not offered 1990–91.

R. G. Calkins.]

**[Seminar in Greek Sculpture (History of Art 431 and Classics 431)]**

Not offered 1990–91.]

**[432 Sardis and the Cities of Asia Minor (History of Art 432 and Classics 432)]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990–91.

A. Ramage.]

**[Problems in Medieval Art and Architecture (History of Art 531)]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1990–91.

R. G. Calkins.]

**The History and Archaeology of Ancient Israel to 450 B.C.E. (Near Eastern Studies 243)**

Spring. 4 credits. Recommended for students planning to participate in Near Eastern Studies 364. Introduction to Field Archaeology in Israel.

T R 11:40–12:55. D. I. Owen.

A detailed survey of the history and archaeology of the land of Canaan from the traditional origins of the Israelite tribes in the early second millennium/middle Bronze Age (ca. 2000 B.C.E.) through the Babylonian exile to the arrival of Ezra and Nehemiah (ca. 450 B.C.E.). Lectures on, and discussions of, Biblical and Near Eastern literary sources relating to the

history of ancient Israel, as well as an analysis of the archaeological evidence, will form the basis of the course.

**[Agriculture and Society in the Ancient Near East (Near Eastern Studies 264)]**

3 credits. Spring. Not offered 1990–91.

D. I. Owen.]

**[267 Mediterranean Archaeology (also Near Eastern Studies 267 and Classics 219)]**

Fall. 3 credits. Not offered 1990–91.

D. I. Owen.]

**[362 History and Archaeology of Ebla (also Near Eastern Studies 362)]**

Fall. 4 credits. Not offered 1990–91.

D. I. Owen.]

**[History and Archaeology of Ancient Egypt (Near Eastern Studies 367)]**

4 credits. Fall. Not offered 1990–91.

D. I. Owen.]

**[International Trade, Market, and Politics in the Ancient Near East (Near Eastern Studies 463 and Society for the Humanities 425)]**

Fall. 4 credits. Not offered 1990–91.]

**D. New World Archaeology**

**[361 Field Archaeology in South America (also Anthropology 361)]**

Spring. 10 credits. Prerequisite: permission of instructor. Not offered 1990–91.

Hours to be arranged (off campus in Chile). T. F. Lynch.]

**The Peopling of America (Anthropology 354)**

Fall. 4 credits.

T R 8:40–9:55. T. F. Lynch.

Prehistoric discovery of the New World, beginning with American Indian origins in Asia and ending with the largely unrecorded European medieval contact with North America. Major topics include crossing the Bering land bridge, big-game hunting and extinctions, postglacial adaptations to changing environments, diversified subsistence in the eastern woodlands, agricultural civilizations of the Midwest and Southwest, and Eskimo and Norse exploration and settlement across the Arctic and North Atlantic.

**Ancient Mexico and Central America (Anthropology 355)**

Spring. 4 credits.

T R 1:25–2:40. J. S. Henderson.

A survey of the cultural history of ancient Mexico and Central America, emphasizing Aztec and Maya civilizations. The use of ethnographic and historical information to enrich archaeological interpretation is a general theme. Specific topics include the emergence of settled farming life, the rise of civilization and the state, and the development of mechanisms that linked the many societies in the region into a single sphere of interaction.

**The Archaeology of South America (Anthropology 356)**

Spring. 4 credits.

T R 8:40–9:55. T. F. Lynch.

Origins and development of South American peoples, subsistence systems, cultures, and civilizations, with special attention to Peru, Bolivia, Chile, and Ecuador. Major topics include the question of the first inhabitants, domestication of plants and animals, the rise of temple-based religions and great art styles, regional interaction, and the formation of militaristic polities and the Inca state.

**[Mesoamerican Religion, Science, and History (Anthropology 456)]**

Fall. 4 credits. Not offered 1990–91.

J. S. Henderson.]

**[Kingship and Culture Identity in Mesoamerica: Interpretive and Comparative Issues (Anthropology 631)]**

Fall. 4 credits. Not offered 1990–91.

J. S. Henderson.]

**[Maya History (Anthropology 656)]**

Fall. 4 credits. Not offered 1990–91.

J. S. Henderson.]

**ASIAN-AMERICAN STUDIES**

See Special Programs and Interdisciplinary Studies.

**ASIAN STUDIES**

E. M. Gunn, chair and director of undergraduate studies (388 Rockefeller Hall, 255-5095); S. Akiba, B. R. Anderson, J. Badgley, A. Bailey, R. Barker, M. G. Bernal, K. Brazell, T. Chaloeamtirana, M. C. Chou, S. Cochran, R. D. Colle, E. W. Coward, Jr., B. de Bary, G. Diffloth, E. C. Erickson, S. Feldman, G. Fields, J. W. Gair, M. D. Glock, D. Gold, M. Hatch, D. Holmberg, J. Huang, K. K. Huynh, J. Jasanoff, M. Katzenstein, K. A. R. Kennedy, A. T. Kirsch, J. V. Koschmann, L. C. Lee, T. Lyons, D. R. McCann, J. McRae, B. G. MacDougall, K. March, T. L. Mei, G. M. Messing, C. Minkowski, S. Mohanty, V. Nee, S. J. O'Connor, T. J. Pempel, C. A. Peterson, J. R. Piggot, T. Poleman, D. Poston, N. Sakai, P. S. Sangren, C. L. Shih, T. Shiraishi, V. Shue, J. T. Siegel, R. J. Smith, J. M. Swanberg-Law, K. Taylor, N. Uphoff, J. Wheatley, C. White, J. Whitman, J. U. Wolff, D. Wyatt, M. W. Young, A. Yee

The Department of Asian Studies encompasses the geographical areas of East Asia, South Asia, and Southeast Asia and offers courses in most of the disciplines of the social sciences and the humanities. Asian studies courses through the 400 level (AS is the prefix) are taught in English and are open to all students in the university. Some of these courses may be counted toward majors in other departments; others fulfill the humanities distribution requirement. Courses listed under Asian Studies offered through other departments may fulfill distribution requirements in history, social sciences, and arts.



## The Major

The applicant for admission to the major in Asian studies must have completed at least one area studies course selected from among those listed under the Department of Asian Studies and must receive permission for admission to the major from the director of undergraduate studies. The student must have received a minimum grade of C in this course and in all other courses counted toward the major.

A student majoring in Asian studies is required to complete two courses at the 200 level (a minimum of 6 credits with a grade of C or better) in one of the Asian languages offered at Cornell. The major consists of at least 30 additional credits (which may include up to 6 credits of further language study) selected by the student in consultation with his or her adviser from among the courses listed under the Department of Asian Studies and numbered 250 and above. Majors in Asian studies normally specialize in the language and culture of one country and often choose an additional major in a traditional discipline.

## Concentration in South Asia Studies

A candidate for the Bachelor of Arts or Science degree at Cornell may take a concentration in South Asia Studies by completing at least 18 credits of course work, including Asian Studies 215 (Introduction to South Asia) and four courses or seminars at the intermediate or advanced levels, two of which may be South Asian language courses.

Students taking a concentration in South Asian studies are considered members of the South Asia Program and will have an adviser from the program faculty. (This adviser will be for the student's concentration and is not a substitute for a student's academic adviser in his or her major.)

One South Asian graduate course may be taken for the concentration with consent of both the instructor and the adviser. The same applies for one South Asia-related research paper on a South Asian subject. Additional courses may be added if offered with comparable South Asia content.

## Concentration in Southeast Asia Studies

A candidate for the Bachelor of Arts or Bachelor of Science degree at Cornell may take a concentration in Southeast Asia studies by completing 15 credits of course work, including a history course and three courses or seminars at the intermediate or advanced level, two of which may be Southeast Asian language courses. Students taking a concentration in Southeast Asia studies are members of the Southeast Asia Program and are assigned an adviser from the program faculty. Such students are encouraged to commence work on a Southeast Asian language and to take advantage of summer intensive language training.

## Distribution Requirement for Nonmajors

**Humanities:** any two courses in Asian art, literature, or religion given by the Department of Asian Studies or listed there under the areas of China, Japan, South Asia, and Southeast Asia, excluding only freshman writing seminars and courses given outside the College of Arts and Sciences. A reasonable sequence is formed by taking any two courses in the same

area or by taking AS 211, 212, 215, or 218, either using two of these courses as a sequence or by following one with a course in the humanities in that area.

**Social Sciences:** any two courses in Asian anthropology, economics, government, linguistics, or sociology given by the Department of Asian Studies or listed there under the areas of China, Japan, South Asia, and Southeast Asia, excluding only freshman writing seminars and courses given outside the College of Arts and Sciences. A reasonable sequence is formed by taking any two courses in the same area or by taking AS 211, 212, 215, or 218, followed by a social science course in that area.

**History:** any two courses in Asian history given by the Department of History and listed under the Department of Asian Studies under the areas of China, Japan, South Asia, and Southeast Asia, excluding only freshman writing seminars and courses given outside the College of Arts and Sciences. A reasonable sequence is formed by taking any two courses in the same area or by taking AS 211, 212, 215, or 218, followed by a history course in that area.

**Honors.** To be eligible for honors in Asian studies, a student must have a cumulative grade average of A- in all Asian Studies area courses, exclusive of language study only, and must successfully complete an honors essay during the senior year. Students who wish to be considered for honors should apply to the director of undergraduate studies during the second term of their junior year. The application must include an outline of the proposed project and the endorsement of a faculty adviser. During the first term of the senior year the student does research for the essay in conjunction with an appropriate Asian studies course or Asian Studies 401. Students of China and Japan must also complete Asian Studies 611 or 612, respectively. By the end of the first term the student must present a detailed outline of the honors essay and have it approved by the faculty sponsor and the director of undergraduate studies. The student is then eligible for Asian Studies 402, the honors course, which entails writing the essay. At the end of the senior year, the student has an oral examination (with at least two faculty members) covering both the honors essay and the student's area of concentration.

## Intensive Language Program (FALCON)

For those students desiring to accelerate their acquisition of Chinese, Japanese, or Indonesian, Cornell offers a full-time intensive language program, the Full-Year Asian Language Concentration (FALCON). FALCON students spend six hours a day, five days a week, for periods of up to a full year studying only the language and thus are able to complete as many as twelve hundred hours of supervised classroom and laboratory work in one year. For further information, students should contact the FALCON Program Office, Department of Modern Languages and Linguistics, 203 Morrill Hall (telephone: 607/255-6457).

## Study Abroad

Cornell is a member of the Inter-University Centers for Chinese Language Study in Taipei and for Japanese Language Study in Yokohama and a member of the Council on International Educational Exchange offering study in China. These centers offer intensive training in both spoken and written forms of the languages. The Kyoto Center for Japanese Studies (KCJS) is an undergraduate program for students who want to spend a year in Japan studying both language and culture.

Cornell is a class-A member of the American Institute of Indian Studies, which offers fellowships in India for intensive language study in Hindi, Bengali, and Tamil. Cornell also offers study abroad opportunities in South Asian studies at the School of Oriental and African Studies at the University of London. For further details, contact the South Asia Program office, 170 Uris Hall (telephone: 607/255-8493).

Other opportunities include a junior year abroad at IKIP-Malang, in Indonesia, or at the School of Oriental and African Studies, University of London. Many other options for study in Asia exist. Undergraduates should consult the Cornell Abroad Program; graduate students should inquire at the East Asia Program, the South Asia Program, or the Southeast Asia Program offices.

## Freshman Writing Seminars

### 103 Revolutions and Social Values in Modern Chinese Literature

Fall. 3 credits.

MWF 1:25–2:15 (sec. 1) or TR 1:25–2:40 (sec. 2). E. M. Gunn.

Noting the revolutions, rebellions, civil wars, and foreign incursions that have plagued China over the past century, a scholar of Asian studies once asked, "Is there a 'modern' Chinese literature?" This course is designed to probe into the twentieth-century literary scene, rich in its variety of experience, its power of description, and its intensity of emotion. We will trace themes through the dramatic turns of events and try to ascertain what has remained constant in the modern era as well as what has changed in the literature with the changes in political life. Preference will be given to the study of short fiction, but poetry, novel, and essay are also forms that we will consult as artifacts of revolutions and social values in modern Chinese literature.

[104 Three Ways of Thought  
Not offered 1990–91.]

### 108 Reality Criteria in Contemporary Vietnam

Fall. 3 credits.

TR 10:10–11:25. K. Taylor.

This course will offer participants an opportunity to develop their writing skills while reading and responding to literary texts written by Vietnamese and by Americans that claim to represent something about the reality of modern Vietnam. Students will be encouraged to establish criteria for determining what is "real" and what is not in twentieth-century Vietnam while learning to write focused, analytical prose.

**110 Ghosts, Demons, and Evil in Japan**  
Fall. 3 credits.

T R 8:40-9:55. J. M. (Swanberg) Law.  
This course is an exploration of the interrelated Japanese conceptions of the sacred, the supernatural, the dead, the occult, and the problem of evil. Through a reading of "fantastic" literature narrative genres from different periods in Japanese history, we will focus on how the religious traditions in Japan have formulated an understanding of the interrelationship between the worlds of the living and the dead and between the realms of the sacred and human beings. Readings will include Buddhist "moral" narratives, miracle and ghost tales, and modern short stories. We will also see two Japanese films. Students will develop both nonfictional and creative writing skills.

**General Education Courses****211 Introduction to Japan**  
Fall. 3 credits.

M W 11:15; disc, see roster. N. Sakai.  
An interdisciplinary introduction to Japanese society and its history especially designed for students not majoring in Asian Studies. The first part of the course focuses on the historical changes in Japanese society from the eighth century down to the nineteenth century; the second part analyzes modern society from a variety of perspectives. It also addresses the question of how Japan is represented in the U.S. mass media. Guest lecturers from five or six different fields offer their opinions on Japanese history, culture, and politics.

**212 Introduction to China**

Spring. 3 credits (4 credits with a special project; consult instructor for information).  
T R 1:25; disc, R 2:30 (3 sections), F 10:10 (2 sections), F 11:15 (2 sections), or F 1:25 (1 section). E. M. Gunn.

An interdisciplinary introduction to Chinese culture especially designed for students not majoring in Asian studies.

**215 Introduction to South Asian Civilization**

Fall. 3 credits (4 credits with a special project; consult instructor for information).  
M W F 11:15. C. Minkowski.

An interdisciplinary introduction to the culture and history shared by India and other states of South Asia. Designed for students not majoring in Asian Studies. Guest lecturers will provide the perspective of their disciplines to the general themes of the course: cultural diversity and the role of tradition in contemporary life.

**218 Introduction to Korea**

Spring. 3 credits. Weekly lecture and discussion meetings. Course enrollment limited to 25.

T R 1:25, sections to be arranged.  
D. McCann.

A multidisciplinary introduction to Korean history and culture, including language, literature, art, and music. The course begins with an overview of Korean history from the Three Kingdoms Period to the Presidential Election of 1987. The course then focuses on major events in Korean history: The March 1, 1919 Independence Movement, the Korean War, the 1960 Student Revolution, the 1980 Kwangju Massacre, or others. Visiting lecturers will speak about Korea from a variety of disciplinary viewpoints, including linguistics, sociology, anthropology, political science, and law.

**Asia—Literature and Religion Courses**

The following courses are taught entirely in English and are open to any Cornell student.

**250 Introduction to Asian Religions**  
Fall. 3 credits.

M W 10:10, sections to be arranged.  
J. McRae.

A survey of the major religious traditions of India, China, and Japan, focusing on Vedic ritual and Brahmanical Hinduism; Indian, Chinese, and Japanese Buddhism; the native Chinese traditions of Confucianism and Taoism; and Shinto, Confucianism, and the new religions in Japan. Emphasis will be on the great traditions of these cultures, with frequent reference to the differing realms of popular religions.

**313 The Japanese Film**

Spring. 4 credits.

Screenings, M W 4:30; lec, T 2:30; sec F 11:15, 12:20, or 1:25.  
J. M. (Swanberg) Law.

After an introduction to methods of film analysis, the course presents a sequence of ten films by noted Japanese directors. The aim of the course is twofold: to enhance appreciation of film as an art form and to use the formal analysis of films to yield insights into Japanese society and culture. Particular attention is given to areas in which Japanese film, influenced by traditional arts and aesthetic principles, has resisted Hollywood editing codes.

**351 The Religious Traditions of India**  
Spring. 4 credits.

M W F 3:35-4:25. D. Gold.

A study of the relationships between the main currents of Indian religion. The course will first focus on the Hindu tradition and its holistic worldview within the context of the caste system. It will then describe the rise of Jainism and Theravada and Mahayana Buddhism, as well as Hindu and Buddhist Tantrism, as religious phenomena reflecting the emergence of individualism.

**[357 Chinese Religions]**

Fall. 4 credits. Not offered 1990-91.]

**358 Buddhism in China**

Fall. 4 credits.

T R 10:10-11:25. J. McRae.

Buddhism was a mature tradition when it came to China, a society of great sophistication and antiquity, and in their remarkable religious and cultural encounter both Buddhism and China were transformed. We will consider Buddhism's introduction and acceptance, the social impact of its monastic system and moral ideals, the literary and artistic contributions of its scriptures and sculpture, the efflorescence of its doctrine and various schools, and its role in Chinese history.

**359 Japanese Buddhism**

Spring. 4 credits.

T R 10:10-11:25. J. M. (Swanberg) Law.

A historical and phenomenological approach to the Japanese religious traditions with an emphasis on a system of interaction, in order to attempt to establish the form of the major forces that have shaped Japanese culture.

**373 Twentieth-Century Chinese Literature**

Spring. 4 credits.

M W F 2:30. A. Bailey.

A survey of the principal works in English translation, the course introduces fiction, drama, essays, and poetry of China beginning

with the Republican era and continuing up to the present in the People's Republic and Taiwan, with attention to social and political issues and literary theory.

**374 Chinese Narrative Literature**  
Fall. 4 credits.

T R 1:25-2:40. A. Bailey.

Selected works in classical Chinese fiction are read in translation. Major novels, such as *The Dream of the Red Chamber* and *Water Margin*, are emphasized.

**375 Japanese Poetry and Poetic Prose**

Spring. 4 credits. Alternates with Asian Studies 377.

M W 2:30-4. K. Brazell.

An introduction (in English translation) to the great poets of premodern Japan. This course will cover court poetry, linked verse, haiku, poetic memoirs, travel diaries, and poem tales written between the eighth and eighteenth centuries.

**[376 Modern Japanese Literature: From Meiji through the Pacific War]**

Fall. 4 credits. Not offered 1990-91.  
B. de Bary.]

**[377 Japanese Narrative Literature]**

Spring. 4 credits. Not offered 1990-91.]

**378 The Postwar and the Postmodern in Japanese Literature**

Fall. 4 credits. Alternates with Asian Studies 375.

T R 10:10-11:25. B. de Bary.

The course will examine narrative, poetry, and drama produced in Japan from 1945 to the present, with special attention to the transition from "postwar" to "postmodernity" as organizing categories of literary discourse. Topics will include the early postwar debate on subjectivity and the I-novel, the writers of Hiroshima and Nagasaki, the critique of "the modern" in avant-garde movements such as the Red and Black Tent theaters, popular literature (cartoons, "light" literature) and the emergence of Japan as a high-level consumer society in the 1980s, literature and sexual politics, and science fiction as cultural criticism.

**380 Vietnamese Literature in Translation**  
Spring. 4 credits.

T R 10:10-11:25. K. Taylor.

This is a survey of Vietnamese literature in translation from the tenth century to the present. Attention will be given to different ways of reading this literature. Format will be primarily readings and discussion with some lecture-style presentations.

**385 Cultural History of Viet Nam**

Fall. 4 credits.

T R 2:55-4:10. K. Taylor.

This course will focus on the cultural and intellectual history of Viet Nam and its relationship to economy and society, government and politics, diplomacy and warfare, literature and religion/ideology from pre-historic times to the present. Both the traditional cultural heritage and the contemporary twentieth-century experience will be given serious attention. This course will fulfill a humanities distribution requirement.

**[388 Asian-American Literature]**

Spring. 3 credits. Not offered 1990-91.]

**[390 Comparative Sanskrit Myth and Epic (also Classics 390)]**

Spring. 4 credits. Not offered 1990-91.]

**391 Classical Indian Narrative (also Classics 391)**

Spring. 4 credits.

T R 1:25. C. Minkowski.

Readings in translation from the principal story literature of ancient India. Sources will include the Vedas, the Jatakas, the Sanskrit epics, the Kathasaritsagara, the Pancatantra and related collections. Attention will be given to comparisons with early Greek narrative and to the diffusion of Indic narrative through the world's literatures.

**393 Images of Humanity in Medieval China (also History 393)**

Fall. 4 credits.

M 2:30–3:20, W 2:30–4:25. C. Peterson and J. McRae.

The middle period in China's history, essentially the T'ang and Sung dynasties, feature some of the highest achievements of Chinese civilization. These centuries (the seventh through the thirteenth) are distinguished by the exceptionally high levels of literature, art, religious and secular thought, and proto-scientific development, as well as by fundamental changes in state, society, and the economy. This seminar will explore the China of this age by examining the lives of several representative figures—a politician, a poet, a Buddhist monk, a Taoist priest, an emperor, an empress, a "detective," and others. The aim will be to reconstruct the inner and outer worlds of men and women perhaps not so far removed from ourselves in their basic motivations and daily concerns.

**[400 The Japanese Noh Theater and Modern Dramatists (also Comparative Literature 400)]**

4 credits. Fall. Not offered 1990–91.

K. Brazell.]

**410 Chinese Performing Arts**

Fall. 4 credits.

Hours to be arranged. E. M. Gunn.

The course will survey drama, music theater, and film in twentieth-century China. Some material will require knowledge of Chinese.

**421 Religious Reflections on the Human Body**

Fall. 4 credits.

T R 1:25–2:40. J. M. (Swanberg) Law.

One undeniable and inescapable fact of human life is that it is experienced in a body. How this fact is understood to define the parameters of religious experience and expression will be the topic of this course. While the format will be comparative, the majority of cases will be drawn from East Asian, primarily Japanese, sources. We will explore how such aspects of the human body as ecstasy, gender, sexual passion, illness, the dialectic of the physical and the spiritual, and corporeal ascetic discipline reveal models of religious reflection on this fact of human experience. Further, we will study how these models become represented in visual art, narrative, and ritual practice.

**[440 Meditation Schools of East Asian Buddhism]**

Spring. Not offered 1990–91.

J. McRae.]

**[454 Women, Revolution, and Socialism (also Women's Studies 454)]**

Spring. 4 credits. Not offered 1990–91.

C. White.]

**[460 Indian Meditation Texts]**

Spring. 4 credits. Not offered 1990–91.

D. Gold.]

**496 Tokugawa Literature and Thought**

Fall. 4 credits.

N. Sakai.

An introduction (in English translation) to literary, theatrical, and intellectual works of the Tokugawa period (1600–1868). We will examine the characteristics of early Tokugawa literary and theatrical works and see how different they are from the literary works of the later Tokugawa period. We will also read the philosophical and philological works on the classics by writers such as Ogyu Sorai and Motoori Norinaga to understand the ways contemporary Japanese intellectuals understood cultural activities and literature during the Tokugawa period.

*Note:* For complete descriptions of courses numbered 600 or above, consult the graduate faculty representative.

**601 Southeast Asia Seminar: Burma**

Fall. 4 credits.

W 3–5. Staff.

**602 Southeast Asia Seminar: Philippines**

Spring. 4 credits.

Hours to be arranged. B. R. Anderson.

**[604 Southeast Asia Seminar]**

Not offered 1990–91.]

**[607–608 The Plural Society Revisited (also Government 653)]**

Fall. 4 credits. 607 may be taken independently for credit; 607 is a prerequisite for 608. Not offered 1990–91.]

**611 Chinese Bibliography and Methodology**

Spring. 1 credit. Prerequisite: permission of instructor. Required of honors students and M.A. candidates.

F 1:25. M. C. Chou.

**612 Japanese Bibliography and Methodology**

Spring. 1 credit. Prerequisite: permission of instructor. Required of honors students and M.A. candidates.

F 2:30. S. Akiba.

**[621 South Asia Seminar]**

Fall. Not offered 1990–91.]

**[622 Seminar on South Asia: State Policy and State Practice: Views of the Subcontinent.]**

Spring. Not offered 1990–91.]

**[650 Seminar on Asian Religions]**

2–4 credits. Prerequisite: permission of instructor. Not offered 1990–91.

Fall, J. M. (Swanberg) Law; spring, J. McRae.]

**676 Southeast Asia Research Training Seminar**

Contact the Southeast Asia Program, 120 Urish Hall, 255-2378, for more information.

**701–702 Seminar in East Asian Literature**

701, fall; 702, spring. 1–4 credits.

Hours to be arranged. Staff.

**703–704 Directed Research**

For additional courses on Asian religion, see "Related Courses" in the China and Japan area courses listing.

**Asia—General Courses****401 Asian Studies Honors Course**

Fall. 4 credits. Intended for seniors who have been admitted to the honors program. Staff.

Supervised reading and research on the problem selected for honors work.

**402 Asian Studies Honors: Senior Essay**

Fall or spring. 4 credits. Prerequisite: admission to the honors program.

The student, under faculty direction, prepares an honors essay.

**403–404 Asian Studies Supervised Reading**

Fall, spring, or both. Credit to be arranged.

Prerequisite: permission of instructor. Open to majors and other qualified students. Intensive reading under the direction of a member of the staff.

**703–704 Directed Research**

703, fall or spring; 704, fall or spring. Credit to be arranged.

Staff.

**Literature in Chinese****213–214 Introduction to Classical Chinese**

213, fall; 214, spring. 3 credits each term.

Prerequisite: qualification in Chinese or permission of instructor. May be taken concurrently with Chinese 101–102, 201–202, 301–302.

M W F 12:20. Tsu-Lin Mei, fall.

**314 Classical Narrative Texts**

Spring. 4 credits. Prerequisite: Chinese 214.

A. Bailey.

**420 T'ang and Sung Poetry**

Fall. 4 credits. Prerequisite: permission of instructor.

Hours to be arranged. T. L. Mei.

Readings in the original Chinese, together with secondary works by Chinese and Western critics.

**421–422 Directed Study**

Fall or spring. 2–4 credits each term. Prerequisite: permission of instructor.

Staff.

**[424 Readings in Literary Criticism]**

Fall or spring. 4 credits. Prerequisite: permission of instructor.

Not offered 1990–91.]

**[427 Approaches to Jin ping mei]**

Fall. 4 credits. Not offered 1990–91.

A. Yee.]

**[428 Approaches to Hung lou meng]**

Spring. 4 credits. Not offered 1990–91.

A. Yee.]

**435 Chinese Buddhist Texts**

Spring. 4 credits.

W 2:30–4:30. J. McRae.

Open to students with background in either Chinese or Japanese, this course will focus on the terminology, syntax, and religious doctrines of Buddhist texts in classical Chinese.

*Note:* For complete descriptions of courses numbered 600 or above, consult the appropriate instructor.

**[603 Seminar in Chinese Fiction and Drama]**

Fall or spring. 4 credits. Prerequisite: permission of instructor. Not offered 1990–91.]

**[605 Seminar in Chinese Fiction and Drama]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990–91.  
E. M. Gunn.]

**[609 Seminar in Chinese Folk Literature]**

Fall or spring, according to demand. 4 credits. Prerequisite: permission of instructor. Not offered 1990–91.  
Staff.]

**[610 Chinese Cultural Criticism]**

Fall. 4 credits. Not offered 1990–91.  
E. M. Gunn.]

**[621–622 Advanced Directed Reading: Chinese Historical Syntax]**

Spring. 2–4 credits. Prerequisite: permission of instructor.  
T. L. Mei.

**Literature in Japanese**

**406 Introduction to Classical Japanese**  
Fall. 4 credits. Prerequisite: permission of instructor.

Hours to be arranged. K. Brazell.

**421–422 Directed Readings**

421, fall; 422, spring; credits to be arranged. Prerequisite: for Japanese 421, Japanese 402 or equivalent; for Japanese 422, Japanese 421 or equivalent.

Hours to be arranged. Staff.

Note: For complete descriptions of courses numbered 600 or above, consult the appropriate instructor.

**[611 Seminar in Classical Japanese Literature]**

Fall or spring. 2–4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1990–91.  
K. Brazell.]

**[612 Seminar in Medieval Japanese Literature]**

Fall or spring. 2–4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1990–91.  
K. Brazell.]

**[613 Seminar in Tokugawa Culture and Thought: Otherness, Text, and Body]**

Spring. 2–4 credits. Prerequisite: permission of instructor. Offered alternate years.  
N. Sakai.

The seminar will examine the cultural and intellectual transformations that took place during the Tokugawa period (1600–1868). The historical materials of the period will be read in such a way as to disclose the inseparable links between ideology, cultural formation, and politics. Topics to be discussed include the transformation of Confucian discourse in the late seventeenth and early eighteenth century, the emergence of extensive language studies in the eighteenth century, changes in the modes of literary production, the articulation of cultural identity in historicist discourse, and the politicality of the poetics. Instead of seeking to trace the genealogy of ideas and the network of influences, we will try to find the conditions and rules according to which certain objects of knowing such as the notion of habit or linguistic community were constituted and how the formation of new knowledge opened up a different set of political strategies.

**[614 Seminar in Modern Japanese Literature]**

Fall or spring. 2–4 credits. Prerequisite: permission of instructor. Offered alternate years.

N. Sakai.

Time and time again, one encounters the theme of death in modern Japanese literature. The course will examine literary discourse in which death as an aesthetic phenomenon is presented or discussed in relation to the Emperor system and the modern nation state. We will analyze the relationships among the modern idea of literature, the aestheticization of national community and the identification with the community through death. Readings will include critical essays by Rene Girard, Kobayashi Hideo, Philippe Lacoue-Labarthe, Yasuda Yojuro, Jean-Luc Nancy, and Jacques Derrida as well as novelistic works by Natsume Soseki, Oe Kenzaburo, Kojima Nobuo, John Okada, and Mishima Yukio.

**[621 Advanced Readings in Pre-Modern Japanese Narrative Literature]**

Fall or spring. 4 credits. Prerequisite: permission of instructor. Offered alternate years.

K. Brazell.

**Graduate-Level Reading Courses****[622 Advanced Readings in Pre-Modern Japanese Poetry]**

Fall or spring. Credit to be arranged. Prerequisite: permission of instructor. Offered alternate years.

K. Brazell.

**[623 Advanced Readings in Pre-Modern Drama]**

Fall or spring. Credit to be arranged. Prerequisite: permission of instructor. Offered alternate years.

K. Brazell.

**[624 Advanced Readings in Modern Literature]**

Fall. 4 credits. Prerequisite: permission of instructor. Offered alternate years.  
T 10:30–12. B. de Bary.

Note: See courses listed under Asia—Literature and Religion Courses for Japanese literature courses in translation.

**Japanese Language**

See Modern Languages and Linguistics.

**FALCON Program**

255-6457; R. Sukle, 412 Morrill Hall, 255-0734; J. Whitman, 308 Morrill Hall, 255-0736.

**Literature in Sanskrit**

**Sanskrit 251, see DMLL.**

**[467–468 Reading in Sanskrit Literature: The Vedas]**

Fall. 3 credits. Not offered 1990–91.

C. Minkowski.

Readings in translation; readings in the original Vedic. Both courses must be taken as a sequence: 467, fall; 468, spring.]

**Literature in Vietnamese****470 Vietnamese Literature: Cultural and Intellectual History**

TR 2:55–4:10. K. Taylor.

A study of texts, in Vietnamese translation from the original Chinese, related to Ly-Tran civilization (eleventh–fourteenth centuries): compilations of tales (Viet dien u linh tap and

Linh nam chich quai), annals (Viet su luoc and Dai Viet su ky toan thu) and encyclopedia (An Nam chi Luoc), and poems and inscriptions compiled in Tho van Ly-Tran. This course will entail discussion of Vietnamese Taoism, Vietnamese Buddhism, Vietnamese Confucianism, and intellectual and literary developments related to Sino-Vietnamese relations, dynastic institutionalization, and cultural formation.

**Related Courses in Other Departments****Anthropology of the City (Anthropology 313)****[Hierarchies, Ritual, and History (Anthropology 611)]**

Not offered 1990–91.]

**Anthropological Approaches to the Study of Buddhism in Asia (Anthropology 619)****Politics in Contemporary Japan (Government 346)****[Politics of Industrial Societies (Government 348)]**

Not offered 1990–91.]

**Political Role of the Military (Government 349)****Graduate Seminar in Political Economy of Change: Rural Development in the World (Government 648)****[Seminar in International Relations of Asia (Government 687)]**

Not offered 1990–91.]

**Introduction to Asian Civilizations (History 190)****Introduction to Asian Civilizations in the Modern Period (History 191)****[Introduction to Art History: Asian Traditions (History of Art 280)]**

Fall.]

**The Arts of Southeast Asia (History of Art 396)**

Spring 1991.

**Ceramic Art of Asia (History of Art 482)****[Problems in Asian Art (History of Art 580)]**

Not offered 1990–91.]

**Introduction to the Study of Religion (Religious Studies 101)****Related Courses in Other Colleges**

The courses listed below will count as College of Arts and Sciences credit only for Asian studies majors.

**Economics of Agricultural Development (Agricultural Economics 464)****Food, Population, and Employment (Agricultural Economics 660)****[Macroeconomic Issues in Agricultural Development (Agricultural Economics 663)]**

Not offered 1990–91.]

**Food and Nutrition Policy (Agricultural Economics 685 and Nutritional Science 685)****Macro Policy in Developing Countries (Agricultural Economics 763)****[Architecture in Its Cultural Context (Architecture 667–668)]**

Not offered 1990–91.]



**[Communication in the Developing Nations (Communication 624)**  
Not offered 1990-91.]

**Social and Demographic Changes in Asia (Rural Sociology 439)**

**Applications of Sociology to Development Programs (Rural Sociology 751)**

## China—Area Courses

**Economic Anthropology (Anthropology 326)**

**Religion, Family, and Community in China (Anthropology 343)**

**[Religion and Ritual in Chinese Society (Anthropology 443)**  
Not offered 1990-91.]

**Economy of China (Economics 369 and 569)**

**[Chinese Government and Politics (Government 347)**  
Not offered 1990-91.]

**[Socialism and the Market in China (Government 443/643)**  
Not offered 1990-91.]

**[Politics of China (Government 645)**  
Not offered 1990-91.]

**[China and the West before Imperialism (History 243)**  
Not offered 1990-91.]

**History of China up to Modern Times (History 293)**

**[History of China in Modern Times (History 294)**  
Not offered 1990-91.]

**[Early Warfare, East and West (History 360)**  
Not offered 1990-91.]

**Undergraduate Seminar in Medieval Chinese History (History 492)**

**[Self and Society in Late Imperial and Twentieth-Century China (History 493)**  
Not offered 1990-91.]

**Chinese Historiography and Source Materials (History 691)**

**Problems in Modern Chinese History (History 693-694)**

**[Seminar in Medieval Chinese History (History 791-792)**  
Not offered 1990-91.]

**[Seminar in Modern Chinese History (History 793-794)**  
Not offered 1990-91.]

**[The Arts of Southeast Asia (History of Art 396)**  
Not offered 1990-91.]

**[The Arts in Modern China (History of Art 481)**  
Not offered 1990-91.]

**Ceramic Art of China and Southeast Asia (History of Art 482)**

**[Human Ecological Series (Rural Sociology 690)**  
Not offered 1990-91.]

**[Contemporary Chinese Society (Sociology 369)**  
Not offered 1990-91.]

Other courses dealing extensively with China are Architecture 667-668; History 190 and 191; History of Art 280, 381, 482, 580, and 596.

## China—Language Courses

**Elementary Course (Chinese 101-102)**

**Elementary Reading (Chinese 109-110)**

**Cantonese Elementary Course (Chinese 111-112)**

**Cantonese Elementary Speaking (Chinese 113-114)**

**FALCON (full-time course, Chinese 161-162)**

**Intermediate Chinese (Chinese 201-202)**

**Intermediate Cantonese (Chinese 211-212)**

**Advanced Chinese (Chinese 301-302)**

**Advanced Chinese Conversation (Chinese 303-304)**

**Advanced Cantonese (Chinese 311-312)**

**[Linguistic Structure of Chinese I (Chinese 403)**  
Not offered 1990-91.]

**[Linguistic Structure of Chinese II (Chinese 404)**  
Not offered 1990-91.]

**Readings in Modern Chinese (Chinese 411-412)**

**Chinese Reading Tutorials (Chinese 413-414)**

**[Chinese Dialect Seminar (Chinese 607)**  
Not offered 1990-91.]

## Japan—Area Courses

**Japanese Society (Anthropology 345)**

**Japanese Ethnology (Anthropology 645)**

**[Business and Labor in Politics (Government 334)**  
Not offered 1990-91.]

**Politics in Contemporary Japan (Government 346)**

**Comparative Politics Field Seminar (Government 605)**

**Introduction to Asian Civilization in the Modern Period (History 191)**

**[Japan and the West (History 192)**  
Not offered 1990-91.]

**State, Society, and Culture in Japan to 1750 (History 297)**

**State, Society, and Culture in Modern Japan (History 298)**

**[The Ideology of the Meiji Restoration (History 489)**  
Not offered 1990-91.]

**[Seminar in Japanese Thought (History 797-798)**  
Not offered 1990-91.]

**[The Arts of Japan (History of Art 384)**  
Not offered 1990-91.]

**Industrial Policy: Lessons for the United States from Japan and Europe (Management NBA 580)**

**Business in Japan (Management NBA 589)**

**[Development in the Pacific Rim (Rural Sociology 492)**  
Not offered 1990-91.]

Other courses dealing extensively with Japan are Anthropology 313; Architecture 667-668; Education 678; History 190 and 191; History of Art 280, 491, 580, and 596.

## Japan—Language Courses

**Elementary Course (Japanese 101-102)**

**Accelerated Introductory Japanese (Japanese 123)**

**FALCON (full-time intensive course, Japanese 161-162)**

**Intermediate Japanese Reading I (Japanese 201-202)**

**Intermediate Japanese Conversation (Japanese 203-204)**

**Intermediate Japanese Reading II (Japanese 301-302)**

**Communicative Competence (Japanese 303-304)**

**Advanced Japanese for Business Purposes (Japanese 341-342)**

**Advanced Japanese Reading (Japanese 401-402)**

**[Linguistic Structure of Japanese (Japanese 404)**  
Not offered 1990-91.]

**Oral Narration and Public Speaking (Japanese 407-408)**

**[History of Japanese Language (Japanese 410)**  
Not offered 1990-91.]

**Directed Readings (Japanese 421-422)**

**Intermediate Japanese for Business Purposes (Japanese 543-544)**

**Advanced Japanese for Business Purposes (Japanese 545-546)**

## South Asia—Area Courses

**Food, Population, and Employment (Agricultural Economics 660)**

**Peoples and Cultures of the Himalayas: (Anthropology 339)**

**[Cultures and Societies of India, Nepal, and Sri Lanka (Anthropology 342)**  
Not offered 1990-91.]

**Anthropological Approaches to the Study of Buddhism in Asia (Anthropology 619)**

**[Himalayan Issues, Problems, and Prospects (Anthropology 623)**  
Not offered 1990-91.]

**South Asia: Readings in Specific Problems (Anthropology 640-641)**

**Architecture in Its Cultural Context (Architecture 667-668)**

**Introduction to South Asian Civilizations (Asian Studies 215)**

**Introduction to Asian Religions (Asian Studies 250)**

**The Religious Traditions of India (Asian Studies 351)**

**[South Asia Seminar: (Asian Studies 621)**  
Not offered 1990-91.]

**[South Asia Seminar: State Policy and State Practice: Views of the Subcontinent (Asian Studies 622)**  
Not offered 1990-91.]

**The Global City (City and Regional Planning 101)**

**[Transnational Corporations and Developing Regions (City and Regional Planning 775)**  
Not offered 1990-91.]

**Theories of Development and Underdevelopment (City and Regional Planning 777)**

**Communication in the Developing Nations (Communication Arts 624)**

**[Fictions of India (English 353)**  
Not offered 1990-91.]

**India: Social and Economic Change in a Democratic Polity (Government 351)**

**The Political Economy of Change (Government 648)**

**[Agrarian Change in South Asia—Politics, Society, and Culture (Government 651)**  
Not offered 1990-91.]

**[Rigveda (Linguistics 619)**  
Not offered 1990-91.]

**[Introduction to Pali (Linguistics 639-640)**  
Not offered 1990-91.]

**Directed Research (Linguistics 701-702)**

**Rural Sociology and International Development (Rural Sociology 205)**

**Gender Relations and Social Change (Rural Sociology 425)**

**[Developments in the Pacific Rim (Rural Sociology 492)**  
Not offered 1990-91.]

**Applications of Sociology to Development Programs (Rural Sociology 751)**

**Sociotechnical Aspects of Irrigation (Rural Sociology 754, Government 644, Agricultural Engineering 754, and Agricultural Economics 754)**

**Elementary Sanskrit (Sanskrit 131-132, also Classics 131-132)**

**Intermediate Sanskrit (Sanskrit 251-252, also Classics 251-252)**

Other courses dealing extensively with South Asia are Anthropology 321 and 611; Agricultural Economics 464; Communication Arts 626; History 190 and 191; History of Art 280, 482, 580, and 596.

### **South Asia—Language Courses**

**Elementary Bengali (Bengali 121-122)**

**Intermediate Bengali (Bengali 201-202)**

**Continuing Bengali (Bengali 203-204)**

**Elementary Course (Hindi 101-102)**

**Intermediate Hindi Reading (Hindi 201-202)**

**Intermediate Composition and Conversation (Hindi 203-204)**

**Advanced Readings in Hindi Literature (Hindi 301-302)**

**Advanced Composition and Conversation (Hindi 303-304)**

**Elementary Course (Nepali 101-102)**

**Intermediate Nepali Conversation (Nepali 201-202)**

**Intermediate Nepali Composition (Nepali 203-204)**

**Elementary Course (Sinhalese 101-102)**

**Intermediate Sinhala Reading (Sinhalese 201-202)**

**Intermediate Composition and Conversation (Sinhalese 203-204)**

**Elementary Course (Tamil 101-102)**

### **Southeast Asia—Area Courses**

**Microeconomic Issues in Agricultural Development (Agricultural Economics 664)**

**Sociotechnical Aspects of Irrigation (Agricultural Economics 754, Agricultural Engineering 754, Rural Sociology 754, and Government 644)**

**Ethnographic Description (Anthropology 306)**

**[Ethnology of Island Southeast Asia (Anthropology 334)**  
Not offered 1990-91.]

**Myth, Ritual, and Sign (Anthropology 424)**

**[Myth and Mythology (Anthropology 610)**  
Not offered 1990-91.]

**[Hierarchies, Ritual, and History (Anthropology 611)**  
Not offered 1990-91.]

**Anthropological Approaches to the Study of Buddhism in Asia (Anthropology 619)**

**Political Anthropology: Indonesia (Anthropology 628 and Government 647)**

**Southeast Asia: Readings in Special Problems (Anthropology 634-635)**

**Reality Criteria in Modern Viet Nam (Asian Studies 108)**

**Vietnamese Literature in Translation (Asian Studies 380)**

**History of Viet Nam (Asian Studies 385)**

**Vietnamese Literature in Translation (Asian Studies 470)**

**Southeast Asia Seminar: Burma (Asian Studies 601)**

**Southeast Asia Seminar: Philippines (Asian Studies 602)**

**[Southeast Asia Seminar (Asian Studies 604)**  
Not offered 1990-91.]

**Southeast Asia Research Training Seminar (Asian Studies 676)**

**Directed Research (Asian Studies 703-704)**

**The Viet Nam War in Historical Perspective (Government 342)**

**Government and Politics of Southeast Asia (Government 344)**

**Political Role of the Military (Government 349)**

**International Relations in South East Asia since 1945 (Government 646)**

**[Political Anthropology: Indonesia (Government 647 and Anthropology 628)**  
Not offered 1990-91.]

**[Political Problems of Southeast Asia (Government 652)**  
Not offered 1990-91.]

**Issues in Contemporary Indo-Chinese Politics (Government 657)**

**[International Relations of Asia (Government 687)**  
Not offered 1990-91.]

**Introduction to Asian Civilization: Modern Period (History 191)**

**Southeast Asia to the Eighteenth Century (History 395)**

**Southeast Asian History from the Eighteenth Century (History 396)**

**Early Southeast Asia: Graduate Proseminar (History 695)**

**Modern Southeast Asia: Graduate Proseminar (History 696)**

**Seminar in Southeast Asian Palaeology (History 697)**

**Seminar in Southeast Asian History (History 795-[796])**  
[796 not offered 1990-91.]

**[Introduction to Art History: Asian Traditions (History of Art 280)**  
Not offered 1990-91.]

**The Arts of Southeast Asia (History of Art 396)**

**[Ceramic Art of China and Southeast Asia (History of Art 482)**  
Not offered 1990-91.]

**[Studies in Asian Art (History of Art 580)**  
Not offered 1990-91.]

**[Problems Methodology Seminar (History of Art 595)**  
Not offered 1990-91.]

**[Farming Systems Research (International Agriculture 606)**  
Not offered 1990-91.]

**Labor in Developing Economies (Labor Economics 332/552)**

**Sociolinguistics (Linguistics 405-406)**

**Field Methods (Linguistics 600)**

**Old Javanese (Linguistics 651-652)**

**Seminar in Southeast Asian Linguistics (Linguistics 653-654)**

**Austronesian Linguistics (Linguistics 655-656)**

**Seminar in Austro-Asiatic Linguistics (Linguistics 657-658)****Directed Research (Linguistics 701-702)****[Tibeto-Burman Linguistics (Linguistics 753)]**

Not offered 1990-91.]

**Introduction to Musics of the World (Music 103)****History, Theory, and Practice of Gamelan (Music 245-246)****Cornell Gamelan Ensemble (Music 445-446)****[Introduction to Ethnomusicology (Music 680)]**

Not offered 1990-91.]

**Rural Sociology and International Development (Rural Sociology 205)****Sociotechnical Aspects of Irrigation (Rural Sociology 754, Agricultural Economics 754, Agricultural Engineering 754, and Government 644)****Special Seminar (Rural Sociology 771)**

Other courses dealing with Southeast Asia are Agricultural Engineering 754 and 771; Anthropology 102 and 420; Architecture 667-668; Asian Studies 250, 351, and 650; Education 685; Government 692; History 190; International Agriculture 603 and 703; Nutritional Sciences 680 and 695.

**Southeast Asia—Language Courses****Elementary Course (Burmese 101-102)****Intermediate Burmese Reading (Burmese 201-202)****Intermediate Composition and Conversation (Burmese 203-204)****Advanced Burmese Reading (Burmese 301-302)****Burmese Directed Individual Study (Burmese 401-402)****Elementary Course (Cebuano [Bisayan] 101-102)****FALCON (full-time intensive course, Indonesian 161-162)****Elementary Course (Indonesian 101-102)****Intermediate Indonesian Reading (Indonesian 201-202)****Intermediate Composition and Conversation (Indonesian 203-204)****Linguistic Structure of Indonesian (Indonesian 300)****Advanced Readings in Indonesian and Malay (Indonesian 301-302)****Advanced Indonesian Conversation and Composition (Indonesian 303-304)****Directed Individual Study (Indonesian 305-306)****Advanced Readings in Indonesian and Malay Literature (Indonesian 401-402)****Elementary Course (Javanese 131-132)****Continuing Course (Javanese 133-134)****Directed Individual Study (Javanese 203-204)****Elementary Course (Khmer 101-102)****Intermediate Khmer Reading (Khmer 201-202)****Intermediate Composition and Conversation (Khmer 203-204)****Advanced Khmer (Khmer 301-302)****Directed Individual Study (Khmer 401-402)****[Structure of Khmer (Khmer 404)]**

Not offered 1990-91.]

**Elementary Course (Tagalog 101-102)****Intermediate Tagalog Reading (Tagalog 201-202)****Linguistic Structure of Tagalog (Tagalog 300)****Elementary Course (Thai 101-102)****Intermediate Thai Reading (Thai 201-202)****Intermediate Composition and Conversation (Thai 203-204)****Advanced Thai (Thai 301-302)****Thai Literature (Thai 303-304)****Directed Individual Study (Thai 401-402)****Elementary Course (Vietnamese 101-102)****Intermediate Vietnamese Reading (Vietnamese 201-202)****Intermediate Composition and Conversation (Vietnamese 203-204)****Advanced Vietnamese (Vietnamese 301-302)****Directed Individual Study (Vietnamese 401-402)****ASTRONOMY**

Y. Terzian, chair (512 Space Sciences Building, 255-4935); M. P. Haynes, director of undergraduate studies (530 Space Sciences Building 255-0610); S. V. W. Beckwith, J. A. Burns, D. B. Campbell, D. F. Chernoff, J. M. Cordes, M. M. Davis, P. J. Gierasch, R. Giovannelli, T. Hagfors, T. L. Herter, J. R. Houck, P. D. Nicholson, C. E. Sagan, E. E. Salpeter, S. L. Shapiro, S. W. Squyres, S. A. Teukolsky, J. F. Veverka, I. M. Wasserman. Emeritus T. Gold, M. O. Harwit

Cornell's astronomy faculty, research staff, and graduate students are active in diverse areas of modern astronomy ranging from theoretical astrophysics and general relativity to radio and radar astronomy, infrared and optical astronomy, and the exploration of the solar system. Cornell operates two local optical observatories, the world's largest radio telescope at Arecibo, Puerto Rico, and with two other institutions, the 200-inch optical telescope at Mt. Palomar in California.

The department offers a number of courses to satisfy a general interest in astronomy. These courses have few or no prerequisites and are not intended for the training of professional astronomers. The 100-level courses are designed primarily for nonscience majors. The alternative introductory sequence Astronomy 211-212 is geared toward sophomore physical

science and engineering majors and requires coregistration in beginning calculus. Astronomy 332 is designed for nonmajors as an introduction to astrophysics and requires at least one year of calculus and college physics as prerequisites. The other courses numbered below 400 have no college prerequisites at all.

Courses numbered above 400 are intended for students who have had two to three years of college physics and at least two years of college mathematics. Astronomy 440, Independent Study, permits students to engage in individual research projects under the guidance of a faculty member.

Interested students are encouraged to become members of the undergraduate Cornell Astronomy Club. The club has access to the Fuyes Observatory on campus and conducts regular observing and astrophotography sessions. All students are invited to visit the Space Sciences Building, see the exhibits on display there, and consult a faculty member about career plans or choice of courses.

**The Major**

The purpose of the major in astronomy is to provide in-depth knowledge and education about the nature of the universe. Similar to other disciplines in the sciences, astronomy relies heavily on preparation in physics and mathematics. Consequently, many courses in these fields are included as prerequisites. In preparation for the major, a student would normally elect the introductory physics sequence Physics 112-213-214 or 116-217-218 plus Physics 315 and 318 and the complementary pathway in mathematics, Mathematics 111-122-221-222 or 191-192-293-294 (or equivalent). The sophomore seminar Astronomy 233 "Topics in Astronomy and Astrophysics" will provide an introduction to current research in astronomy and astrophysics for prospective majors, but is not required of students who elect to major in astronomy after the sophomore year. Students are also urged to acquire computer literacy. Acceptance to the major will first be considered after completion of three semesters of introductory physics and mathematics and in general will require a GPA of 3.20 in physics and mathematics courses.

The major requirements stress the importance of building a strong preparation in physical science. The following upper level courses are normally required:

Physics 324, 326, 341, and 443  
Mathematics 421 and 422 (or equivalent)  
Astronomy 410, 431, and 432.

Students are encouraged to supplement the above courses with any astronomy, physics, or other appropriate courses at or above the 400 level. Advanced seniors can enroll in astronomy graduate courses with the consent of the instructor. Students are also encouraged to work with faculty members on independent study projects (Astronomy 440).

**Honors.** A student may be granted honors in astronomy upon the recommendation of the Astronomy Advisers Committee of the astronomy faculty.

**Double majors.** A double major in astronomy and another subject is possible in many circumstances. However, the set of courses used to fulfill the requirements for each major must be completely independent.

**Concentration.** Students majoring in other fields but interested in astronomy are encouraged to supplement their major with a concentration in astronomy, an option that is somewhat less intensive than a major. Normally Astronomy 431 and 432 are required for a concentration.

### Distribution Requirement

The distribution requirement in physical sciences is met by A101 or A211, plus A102 or A212; or A102 or A212, plus A332. A103 and A104, identical to A101–102 except for the omission of the laboratories, cannot be used to satisfy the distribution requirement for students in the College of Arts and Sciences.

### Courses

#### 101 The Nature of the Universe

Fall. 4 credits. No prerequisites. Labs and discussions limited to 20 students each.

Lecs, M W F 11:15; labs, every other week: M T or W 2:30–5 or M T W or R 7:30–10 p.m.; disc, one hour every week: M or W 1:25, 2:30, 3:35, or 7:30 p.m., or T or R 2:30, 3:35, or 7:30 p.m. Y. Terzian; labs, P. D. Nicholson.

The physical nature of existence. An examination of the universe and our place in it and the possible existence of life and intelligence elsewhere in the cosmos. The nature of stars, galaxies, and quasi-stellar sources. The birth, evolution, and death of stars and the formation of the chemical elements, including discussions of supernovae, pulsars, neutron stars, and black holes. The physical state and composition of the interstellar material and its influence on the evolution of our galaxy. An introduction to the special and general theories of relativity. The nature of time. Modern theories of cosmology and the structure and evolution of the universe.

#### 102 Our Solar System

Spring. 4 credits. No prerequisites. Limited to 330 students (combined total with Astronomy 104: 430 students). Labs and discussions limited to 20 students each.

Lecs, M W F 11:15; labs every other week: M T or W 2:30–5 or M T W or R 7:30–10 p.m.; disc, one hour every week: M or W 1:25, 2:30, 3:35, or 7:30 p.m. or T or R 2:30, 3:35, or 7:30 p.m. J. F. Veverka; labs, P. D. Nicholson.

The evolution of our understanding of the formation and structure of the solar system will be discussed. Modern theories of the solar system will be compared with the results of the space program. The chemical basis of life and current ideas about the spontaneous appearance of life will be considered along with searches for life beyond the earth, both inside and outside the solar system.

#### 103 The Nature of the Universe

Fall. 3 credits. Identical to Astronomy 101 except for omission of the laboratory (see description above). This course does not satisfy the distribution requirement in physical sciences for students in the College of Arts and Sciences.

#### 104 Our Solar System

Spring. 3 credits. Limited to 100 students (combined total with Astronomy 102: 430 students).

Identical to Astronomy 102 except for omission of the laboratory (see description above). This course does not satisfy the distribution requirement in physical sciences for students in the College of Arts and Sciences.

#### 105 An Introduction to the Universe

Summer. 3 credits.

M–F 11:30–12:45; evening labs to be arranged. Staff.

How do we measure the size of our galaxy and the size of the universe? Is the universe round or flat? How are the stars born, why do they shine, and how do they die? What are the chemical elements, and how were they formed in stars? What are quasars, pulsars, and black holes? How was the solar system formed? What are the environments of other planets like? What is the basic structure of Earth and the other planets? Will man catastrophically alter the earth? Does life exist elsewhere in the universe? How can we find out? Each student has an opportunity to make observations with small telescopes.

#### 106 Essential Ideas in Relativity and Cosmology

Summer. 3 credits. Prerequisites: high school algebra and trigonometry.

M–F 10–11:15. Staff.

Einstein's theories of special and general relativity, which brought about a fundamental change in our conceptual understanding of space and time, will be studied. Correspondence to, and conflicts with, common sense will be pointed out. Applications to various areas will be studied: in special relativity—space travel, equivalence of mass and energy, nuclear fission and fusion, and thermonuclear processes in the sun; in general relativity—motion of light and particles in curved space-time, cosmological models, and the question of whether the universe is open or closed.

#### 107 Freshman Writing Seminar: The Universe of Modern Science

Fall and spring. 3 credits. Limited to 17 students. Students may enroll by Freshman Writing Seminar ballot only.

T R 1:25–2:40. C. Hovis.

Focusing on the development of the current scientific picture of the evolution of the universe, this course will survey the foundations and history of modern cosmology and elementary-particle physics. By preparing comparative, critical, and expository essays related to assigned readings from the works of scientists, historians, and philosophers, students will learn to write clearly and accurately about modern science, to identify problems and gaps existing in its views, and to think critically about how and why the constituent theories of our contemporary picture of cosmic evolution have emerged as the best explanations available in light of the evidence.

#### 201 Our Home in the Universe

Spring. 3 credits. Prerequisite: some background in science.

T R 2:55–4:10. C. Sagan.

A comparison of the Earth with the other worlds of our solar system, with an emphasis on the nature and fragility of planetary environments. Topics to be discussed include the origin and evolution of life, species extinctions, the history of climate change, evolution of the atmosphere of the Earth and

other planets, ecology and biological interdependence, and threats to the current global environment—including ozone layer depletion, greenhouse warming, and nuclear winter. Possible solutions to these problems, including their economic and social costs and their ethical implications, will be considered. The course will attempt to develop skills in writing and in elementary physics and chemistry.

#### 211 Astronomy: Stars, Galaxies, and Cosmology

Spring. 4 credits. Intended for engineering and physical sciences freshmen. Prerequisite: introductory calculus or coregistration in Mathematics 111 or 191.

Lecs, M W F 10:10; rec, one hour each week to be arranged; plus some evening observing periods. I. Wasserman.

The formation and evolution of stars. Supernovae, pulsars, quasars, and black holes. The interstellar medium. The structure and evolution of galaxies. Cosmology.

#### 212 The Solar System: Planets, Satellites, and Rings

Fall. 4 credits. Intended for engineering and physical sciences freshmen. Prerequisite: introductory calculus or coregistration in Mathematics 111 or 191.

Lecs, M W F 11:15; rec, one hour each week to be arranged; possible evening observing labs to be arranged.

S. Squyres.

The origin of the solar system; celestial mechanics; tidal evolution; the physics and chemistry of planetary surfaces, atmospheres, and satellites; interiors; planetary rings; asteroids, comets, and meteorites; the search for other planetary systems.

#### 233 Topics in Astronomy and Astrophysics

Fall. 2 credits. Prerequisites: Physics 112 and 213, Mathematics 112 and 221, or permission of instructor.

T R 1:25–2:15. M. Haynes.

A seminar course on advanced topics in astronomy and astrophysics designed for prospective astronomy majors. Content will vary from year to year, but will include topics from the fields of planetary, galactic, and extragalactic research.

#### [321 Life in the Universe

Spring. 4 credits. Not offered 1990–91.]

#### 332 Elements of Astrophysics

Spring. 4 credits. Prerequisites: calculus and Physics 213. Physics 214 strongly recommended.

Lec M W F 11:15. P. Nicholson, J. Burns.

An introduction to astronomy, with emphasis on the application of physics to the study of the universe. Physical laws of radiation. Distance, size, mass, and age of stars, galaxies, and the universe; stellar evolution and nucleosynthesis. Supernovae, pulsars, and black holes. Galaxies and quasars. Introduction to cosmology. Intended for students interested in astronomy, physics, and engineering.

#### 410 Experimental Astronomy

Fall. 4 credits. Prerequisites: Physics 214 (or 310 or 360), Physics 325 (or co-registration) or permission of instructor. Limited to 10 students.

Hours to be arranged. S. Beckwith, J. Cordes, T. Herter.

Topics in experimental concepts in astrophysics. Major experiments will involve techniques in telescope operation, astronomical photography, CCD (charge-coupled-device) imaging,



optical photometry, optical spectroscopy, and radio astronomy. Most of the experiments involve use of the 24-inch Hartung-Boothroyd Observatory. The radio astronomy experiments employ a radio telescope mounted on top of the Space Sciences Building. The laboratory covers the fundamentals of using astronomical instrumentation and performing data analysis applied to celestial phenomena, such as normal stars, neutron stars, and planetary nebulae.

#### **431 Introduction to Astrophysics and Space Sciences I**

Fall. 4 credits. Prerequisites: mathematics above the 200 level and physics above the 300 level; concurrent registration in Physics 341 and 443 is helpful.

TR 10:10–11:25. P. Gierasch.  
A systematic development of modern astrophysical concepts for physical science majors. Atomic and electromagnetic processes in space. Introduction to star formation, stellar structure, stellar atmospheres, and the interstellar medium. At the level of *Astrophysical Concepts*, by Harwit.

#### **432 Introduction to Astrophysics and Space Sciences II**

Spring. 4 credits. Prerequisite: Astronomy 431 or permission of instructor.

MWF 10:10. D. Chernoff.  
Astrophysics is discussed in the context of cosmology. Cosmological subjects covered include the expansion of the universe, metrics, Friedmann equations, dark matter, cosmological tests, the early universe, formation of galaxies, and cosmological production of the elements. Astrophysical subjects drawn on include special relativity, radiative transfer, electromagnetism, quantum mechanics, gravitational physics, and nuclear physics. At the level of *Astrophysical Concepts*, by Harwit.

#### **[433 The Sun]**

Fall. 4 credits. Not offered 1990–91.]

#### **[434 The Evolution of Planets]**

Fall. 4 credits. Not offered 1990–91.]

#### **440 Independent Study in Astronomy**

Fall or spring. 2–4 credits. Prerequisite: permission of instructor. Recommended: familiarity with the topics covered in Astronomy 332, 431, or 434.

Hours to be arranged. Staff.  
Individuals work on selected topics. A program of study is devised by the student and instructor. Students need to fill out an independent study form, have it signed by the instructor, and register in the department office, 510 Space Sciences Building.

#### **[490 Senior Seminar—Critical Thinking]**

Spring. 3 credits. Not offered 1990–91.]

#### **509 General Relativity (also Physics 553)**

Fall. 4 credits. Prerequisite: knowledge of special relativity at the level of, for example, *Classical Mechanics*, by Goldstein.

TR 1:25–2:40. S. L. Shapiro.  
A systematic introduction to Einstein's theory, with emphasis on modern coordinate-free methods of computation. Topics include review of special relativity, modern differential geometry, foundations of general relativity, laws of physics in the presence of a gravitational field, and experimental tests of gravitational theories. At the level of *Gravitation*, by Misner, Thorne, and Wheeler.

#### **510 Applications of General Relativity (also Physics 544)**

Spring. 4 credits. Prerequisite: Astronomy 509.

TR 1:25–2:40. S. L. Shapiro.  
A continuation of Astronomy 509 with emphasis on applications to astrophysics and cosmology. Topics include relativistic stars, gravitational collapse and black holes, gravitational waves, and cosmology.

#### **[511 Physics of Black Holes, White Dwarfs, and Neutron Stars (also Physics 525)]**

Fall. 4 credits. Not offered 1990–91.]

#### **516 Galactic Structure and Stellar Dynamics**

Fall. 4 credits.

WR 10:10–11:25. D. Chernoff, I. Wasserman.

The kinematics and distribution of stars in the solar neighborhood. The dynamical structure, composition, and evolution of our galaxy. Characteristics and classifications of galaxies, galaxy groups, globular clusters, and clusters of galaxies. Theory of N-body systems, stellar encounters, collisional and violent relaxation, and stellar evaporation rates. Dynamical evolution of star clusters and associations. Theory of spiral structure. Binary and rotating star systems.

#### **[520 Radio Astronomy]**

Fall. 4 credits. Not offered 1990–91.]

#### **[521 Radio Astrophysics]**

Spring. 4 credits. Not offered 1990–91.]

#### **523 Signal Processing and Data Analysis in Astronomy**

Fall. 4 credits. Prerequisites: mathematical background equivalent to undergraduate physical science curriculum and familiarity with FORTRAN programming.

MW 1:25–2:40. J. Cordes.  
Topics will include Fourier analysis of discrete and continuous time series, spectral analysis, parameter estimation, probability theory, and stochastic processes image formation from coherence functions. The orientation will be toward applications in observational astronomy and astrophysics. Discussion of applications such as interferometry, image processing, scintillation theory, planetary radar, and pulsar studies. Course work will include application on the IBM 370.

#### **525 Techniques of Optical and Infrared Astronomy**

Fall. 4 credits.

MWF 9:05–9:55. T. L. Herter.  
Optical and infrared telescopes, their auxiliary instrumentation; solid state panoramic detectors; observing procedures and data analysis will be presented. The techniques of UV and X-ray astronomy will be discussed. Intended for students with a thorough understanding of undergraduate physics.

#### **526 Infrared and Optical Astrophysics**

Spring. 4 credits.

Hours to be arranged. S. Beckwith.  
Most of the course will be devoted to results and interpretation of recent observations, including the findings of the Infrared Astronomical Satellite. Modern techniques and their limitations will be briefly discussed.

#### **[555 Theory of the Interstellar Medium (also Physics 665)]**

Spring. 4 credits. Not offered 1990–91.]

#### **[560 Theory of Stellar Structure and Evolution (also Physics 667)]**

Fall. 4 credits. Not offered 1990–91.]

#### **[570 Physics of the Planets]**

Spring. 4 credits. Not offered 1990–91.]

#### **571 Mechanics of the Solar System (also Theoretical and Applied Mechanics 673)**

Spring. 3 credits. Prerequisite: an undergraduate course in dynamics.

Hours to be arranged. J. Burns, P. D. Nicholson.

Gravitational potentials, planetary gravity fields. Free and forced rotations. Chandler wobble, polar wander, damping of nutation. Equilibrium tidal theory, tidal heating. Orbital evolution of natural satellites, resonances, spin-orbit coupling. Cassini states. Long-term variations in planetary orbits. Dust dynamics. Dynamics of ring systems. Physics of interiors, seismic waves, free oscillations. Illustrative examples are drawn from contemporary research.

#### **[575 Atmospheric and Ionospheric Physics (also Electrical Engineering 585)]**

Fall. 3 credits. Not offered 1990–91.]

#### **[576 Solar Terrestrial Physics (also Electrical Engineering 586)]**

Spring. 3 credits. Not offered 1990–91.]

#### **[579 Celestial Mechanics (also Theoretical and Applied Mechanics 673)]**

Spring. 3 credits. Not offered 1990–91.]

#### **590 Galaxies and the Universe**

Spring. 4 credits.

Hours to be arranged. M. P. Haynes.  
The universe, its constituents, its large-scale structure, and its history in the light of the major thrusts of extragalactic research. The morphology, photometry, dynamics, and kinematics of galaxies and their subsystems. Determination of masses, mass-to-light ratios, and the "missing mass." Activity in Seyferts, radio galaxies, and quasars. Binaries, groups, clusters, and superclusters. The extragalactic distance scale. Galaxy formation and evolution. Confrontation of cosmological theories with observational results.

#### **[599 Cosmology]**

Fall. 4 credits. Not offered 1990–91.]

#### **[620 Seminar: Advanced Radio Astronomy]**

Fall. 2 credits. Not offered 1990–91.]

#### **[621 Seminar: Planetary Radar Astronomy]**

Spring. 3 credits. Not offered 1990–91.]

#### **640 Advanced Study and Research**

Fall or spring. Credit to be arranged.

Hours to be arranged. Staff.  
Guided reading and seminars on topics not currently covered in regular courses. Students need to register in the department office, 510 Space Sciences Building.

#### **[660 Cosmic Electrodynamics (also Applied and Engineering Physics 608)]**

Spring. 2 credits. Not offered 1990–91.]

**671 Seminar: The Planet Venus**

Spring. 3 credits. Prerequisite: permission of instructors.

Hours to be arranged. D. Campbell, S. Squires.

Course will review our current understanding of the planet with emphasis on the planet's surface and any information that can be derived about its interior. Results from the Magellan radar mapper mission to the planet will be discussed.

**[673 Seminar: Planetary Atmospheres**  
Fall. 2 credits. Not offered 1990-91.]**[680 Seminar: Cosmic Rays and High-Energy Electromagnetic Radiation**  
Spring. 2 credits. Not offered 1990-91.]**[690 Seminar: Computational Astrophysics (also Physics 681)**

Spring. 3 credits. Prerequisites: working knowledge of FORTRAN. Only those students who have completed the fundamental graduate physics courses should consider attending. Not offered 1990-91.]

**699 Seminar: Solid State Astrophysics (also Physics 681)**

Fall. 2 credits.

Hours to be arranged. E. Salpeter.

An informal seminar, meeting once a week, for advanced graduate students in astronomy or physics. Topics: Physics of Interstellar Dust Grains; Equations of State at High Density.

## BIOLOGICAL SCIENCES

P. J. Bruns, director (169 Biotechnology Building, 255-5042); H. T. Stinson, associate director and director of undergraduate studies (200 Stimson Hall, 255-5233); R. M. Sparrow, Biology Center coordinator (Biology Center, 216-222 Stimson Hall, 255-3358); M. L. Cox, executive staff assistant (200 Stimson Hall, 255-6859)

Biology is a popular subject at many universities for a variety of reasons: It is a science that is in an exciting phase of development; it prepares students for careers in challenging and appealing fields such as human and veterinary medicine and environmental sciences; and it deals with the inherently interesting questions that arise when we try to understand ourselves and the living world around us. Many of the decisions we face today deal with the opportunities and problems that biology has put before us.

The program of study in biology at Cornell is offered by the Division of Biological Sciences to students enrolled in either the College of Agriculture and Life Sciences or the College of Arts and Sciences. Student services in the division's office for academic affairs and the Behrman Biology Center are available to students from either college.

The biology major is designed to enable students to acquire necessary scientific foundations, to study in a specific area of biology, and to obtain breadth by studying different aspects of modern biology. Programs of study include animal physiology and anatomy; biochemistry; botany; cell biology; ecology, systematics, and evolution; general biology; genetics and development; microbiology; and neurobiology and behavior. A special program of study is available for qualified students with an interest in nutrition. Students interested in the marine sciences may consult

the Cornell Marine Programs Office (G14 Stimson Hall, 255-3717) for academic advice and career counseling. For more details about the biology curriculum see the section in this catalog on the Division of Biological Sciences.

BURMESE AND CEBUANO  
(BISAYAN).

See Modern Languages and Linguistics.

## CHEMISTRY

J. C. Clardy, chair and director of undergraduate studies (124 Baker Laboratory, 255-4174); H. D. Abruna, A. C. Albrecht, B. A. Baird, T. P. Begley, J. M. Burlitch, B. K. Carpenter, D. B. Collum, F. J. DiSalvo, G. S. Ezra, R. C. Fay, J. M. J. Frechet, J. H. Freed, B. Ganem, R. Hoffmann, P. L. Houston, A. Kuki, R. Loring, F. W. McLafferty, J. E. McMurtry, J. Meinwald, G. H. Morrison, L. A. Philips, R. F. Porter, H. A. Scheraga, D. A. Usher, B. Widom, J. R. Wiesenfeld, C. F. Wilcox, P. T. Wolczanski, D. B. Zax

The chemistry department offers a full range of courses in physical, organic, inorganic, analytical, theoretical, bioorganic, and biophysical chemistry. In addition to their teaching interests, chemistry faculty members have active research programs. The link between teaching and research is a vital one in a continuously evolving scientific subject; it ensures that students will be provided with the most advanced information and perspectives, and affords opportunities for students to participate in research.

## The Major

The chemistry major at Cornell provides a great deal of flexibility and prepares students for a large variety of career options. In recent years, chemistry majors have gone on to graduate study in chemistry, medicine, law, and business management, as well as directly into positions with chemical, pharmaceutical, and other industrial companies. A major in chemistry can also provide the basis for significant work in related areas such as molecular biology, chemical physics, geochemistry, chemical engineering, materials science, solid state physics, and secondary education. The required courses for the major can be completed in three years, leaving the senior year open for advanced and independent work under the supervision of a professor.

The courses are arranged as a progression, with some (including mathematics and physics) prerequisite to those that are more advanced. During the first year, a student should normally register for general chemistry (preferably Chemistry 215-216 although Chemistry 207-208 is also acceptable), mathematics, a freshman writing seminar course, a foreign language if necessary, or physics. Chemistry 215-216 is aimed at those students with good preparation and a strong interest in chemistry. Students who do not know if their preparation is adequate should consult the instructor. In the second year the student should complete calculus and take physics and organic chemistry (Chemistry 359-360 is preferred to Chemistry 357-358).

The second-year laboratory courses include 300, Quantitative Chemistry, if needed, and 301, Experimental Chemistry I. Chemistry 389-390, Physical Chemistry I and II, and Chemistry 302-303, Experimental Chemistry II and III, should be completed in the third year. Chemistry 410 should be completed in the third or fourth year. Advanced work in chemistry and related subjects can be pursued in the fourth year and in the earlier years as well. The opportunity for independent research is also available. All students with questions about the major are encouraged to consult the chair of the Department of Chemistry or the chair's representative. Entering students who are exceptionally well prepared in chemistry may receive advanced placement credit for Chemistry 207.

Prerequisites for admission to a major in chemistry are (1) Chemistry 215-216 or 207-208 plus 300, (2) Physics 207, and (3) Mathematics 111 or 191. Students are not encouraged to undertake a major in chemistry unless they have passed those prerequisite courses at a good level of proficiency. Knowledge of simple computer programming is essential. This may be achieved either by self-study (a syllabus is available) or by taking courses such as Computer Science 100. The minimum additional courses that must be completed for a major in chemistry are listed below.

- 1) Chemistry 301, 302, 303, 359, 360 (or, if necessary, 357-358 may be substituted), 389, 390, and 410
- 2) Mathematics 112 plus 213; or 122 plus 221, 222; or 192 plus 293, 294
- 3) Physics 208

Potential majors electing to take Mathematics 213 are strongly urged to do so in their sophomore year to avoid scheduling conflicts with Chemistry 389 in their junior year.

The sequence described above is a basic program in chemistry that students can extend substantially in whatever direction suits their own needs and interests. Those going on to do graduate work in chemistry should recognize that these requirements are minimal and should supplement their programs, where possible, with further courses such as Chemistry 405, 605, 606, 666, and 681. Even students not planning graduate work in chemistry should consider advanced work in physics and mathematics, courses in the biological sciences, and advanced work in chemistry as possible extensions of the basic program.

**Honors.** The honors program in chemistry offers superior students an opportunity to study independently in seminars and to gain additional experience by engaging in research during the senior year. It is particularly recommended to those who plan graduate work in chemistry. Prospective candidates should complete the introductory organic chemistry and physical chemistry sequences by the end of the junior year. However, failure to have completed those courses in the junior year does not in itself disqualify a student from the honors program. Completion of the program at a high level of performance leads to the degree of Bachelor of Arts with honors in chemistry. Students will be admitted to the program by invitation of the department. Selection will be based on a superior cumulative average, including chemistry grades, and good performance in a prior research program.

Prospective candidates should discuss their plans with advisers by March 1 of their junior year. Participants are notified by early January of their senior year. To be awarded honors, candidates must show outstanding performance in at least 8 credits of undergraduate research such as is offered in Chemistry 421, 433, 461, or 477. In addition, superior performance, including the writing of a thesis, in the honors seminar (Chemistry 498) is expected.

### The Alternate Major

The alternate major is a flexible program that provides core coverage of chemistry around which students can design a program to meet their own career goals. Requirements consist of a core program along with four additional courses chosen by the student. The additional courses, one of which must be in chemistry at the 300 level or above, should represent a cohesive plan and must be approved by a departmental committee.

### The Core Program

- 1) Chemistry 215–216 (or 207–208 plus 300), 253, 251, 287, 289, and 410 (Chem 357–358 or 359–360 can be substituted for Chem 253, or Chem 389–390 can be substituted for Chem 287, thereby fulfilling the requirement for an additional chemistry course)
- 2) Mathematics 111, 112; or 111, 122; or 191, 192
- 3) Physics 207–208

### Additional Courses

Possible plans for the remaining three courses might include programs in Biochemistry; Biology; Physics; Computer Science; Polymers; Materials Science; Science, Technology, and Society; History and Philosophy of Science and Technology; Business and Management; Economics; Education; and others.

Premedical students and those interested in pursuing double majors might find the alternate major particularly attractive. The course requirements for admission to the alternate major are the same as those for the standard major.

### Program for Science Teachers

Chemistry majors who wish to become teachers will be interested to know that Cornell University offers a certification program for teachers of secondary (grades 7–12) science. Interested students apply to the program during their sophomore or junior years. If accepted, students integrate some course work in Education with the rest of their undergraduate studies. All chemistry majors who enter this program will remain in the College of Arts and Sciences to complete the major.

After earning the bachelor's degree, certification students enter the Graduate Field of Education to complete a fifth year of study at Cornell. Following this fifth year, students are eligible for a master's degree from Cornell and a teaching certificate from New York State. Financial support is available for qualified applicants. Additional information is available from Susan Blish, 106 Kennedy Hall, 255-9255 or Prof. Deborah Trumbull, 426 Kennedy Hall, 255-3108.

### Laboratory Course Regulations

Students registered for laboratory courses who do not appear at the first meeting of the laboratory will forfeit their registration in that course.

Students and members of the teaching staff are required to wear safety goggles and lab aprons in all chemistry laboratories. Students are reminded to take their goggles and lab aprons to the first laboratory session. Those who fail to cooperate with the safety program will be asked to leave the laboratories.

Students are required to pay for glassware and any other items broken or missing from their laboratory desks at the close of each semester. Students who fail to inventory their desks at the appointed time in the presence of their instructor are charged a \$10 fee in addition to charges for any breakage.

### Courses

Preliminary examinations for all courses may be given in the evening.

#### 103–104 Introduction to Chemistry

103, fall or summer; 4 credits. 104, spring or summer; 3 credits. Enrollment limited. Prerequisite for Chemistry 104: Chemistry 103. Recommended for students who have not had high school chemistry and for those needing a less mathematical course than Chemistry 207–208.

Lecs, M W 11:15; lab, T or R 8–11, or F 10:10–1:10, or M W or F 1:25–4:25. Prelims: 7:30–9 p.m., Oct. 4, Nov. 13, Feb. 28, April 11. Fall: B. Widom; spring: D. A. Usher.

An introduction to chemistry, with emphasis on the important principles and facts of inorganic and organic chemistry.

#### 203 The World of Chemistry

Spring. 3 credits. This course plus Chemistry 103 or 207 or 211 satisfies the College of Arts and Sciences physical science distribution requirement.

Lecs and discs: M W F 12:20. D. Harpp. This course will detail the historical, practical, and simple chemical aspects of such topics as food, food additives, vitamins, the diet cancer question, and drugs (including over-the-counter, prescription, and street drugs). In addition, the influence of the media on important science issues will be described along with science publishing, including aspects of fraud. Finally, plastics, water and air pollution, acid rain, cosmetics, the principles of combustion, biotechnology, and the chemistry of crime detection will be presented. Extensive use will be made of demonstrations and visual aids.

#### 207–208 General Chemistry

207, fall or summer; 208, spring or summer. 4 credits each term. Enrollment limited. Recommended for those students who will take further courses in chemistry. Prerequisite for Chemistry 207: high school chemistry. Prerequisite for Chemistry 208: Chemistry 207 or 103–104.

Lecs: fall, T R 10:10 or 12:20; spring, T R 9:05 or 10:10. Lab: fall, T R 8–12 or M T W R or F 12:20–4:25; spring, M T W R or F 12:20–4:25. Prelims: 7:30–9 p.m., Sept. 25, Oct. 25, Nov. 27, Feb. 26, April 9.

Fall: J. E. McMurry; spring: R. Hoffmann.

The important chemical principles and facts are covered, with considerable attention given to the quantitative aspects and to the techniques

important for further work in chemistry. Second-term laboratory includes a systematic study of qualitative analysis.

*Note:* Entering students exceptionally well prepared in chemistry may receive advanced placement credit for General Chemistry by demonstrating competence in the advanced placement examination of the College Entrance Examination Board or in the departmental examination given at Cornell before classes start in the fall.

#### 211 Chemistry for the Applied Sciences

Fall or spring. 4 credits. Recommended for those students who intend to take only one term of chemistry. Enrollment limited. Prerequisite: high school chemistry or permission of instructor. Corequisite: a calculus course at the level of Mathematics 111 or 191.

Lecs: fall, M W F 12:20; spring, M W F 10:10. Lab: fall, M T W R F 1:25–4:25; spring, M T W R F 1:25–4:25. Prelims: 7:30–9 p.m., Sept. 25, Oct. 25, Nov. 27, Feb. 14, March 12, April 18. Fall: F. J. DiSalvo; spring: B. Widom.

The important chemical principles and facts are covered with the objective of understanding the role of chemistry in other fields. Emphasis is on topics such as solid-state materials, periodic trends, and specific classes of compounds, such as polymers.

*Note:* Entering students exceptionally well prepared in chemistry may receive advanced placement credit for General Chemistry by demonstrating competence in the advanced placement examination of the College Entrance Examination Board or in the departmental examination given at Cornell before classes start in the fall.

#### 215–216 General and Inorganic Chemistry

215, fall; 216, spring. Fall, 4 credits; spring, 5 credits. Recommended for students who intend to specialize in chemistry or in closely related fields. Enrollment limited. Prerequisites: good performance in high school chemistry and physics and in mathematics SAT. Corequisite: a calculus course at the level of Mathematics 111 or 191 for students who have not taken high school calculus. Prerequisite for Chemistry 216: Chemistry 215.

Fall: lec, M W F 12:20; lab, M T W R or F 1:25–4:25. Spring: lec, M W F 12:20; two labs, M W 1:25–4:25, T R 10:10–1:10 or T R 1:25–4:25. Prelims: 7:30–9 p.m., Oct. 2, Oct. 25, Nov. 20, Feb. 14, March 12, April 18. Fall: P. L. Houston; spring: T. Beebe.

An intensive systematic study of the laws and concepts of chemistry, with considerable emphasis on quantitative aspects. Second term includes systematics of inorganic chemistry. Laboratory work covers both qualitative and quantitative analysis.

**[222 Molecular Messengers in Nature]**

Spring. 3 credits. Prerequisite: one year of high school chemistry, Chemistry 103 or 207, or permission of instructor. Not offered 1990–91.

Lecs, M W 11:15; disc, F 11:15.

J. Meinwald.

Organisms communicate with one another in nature chiefly by means of chemical signals. We will examine this intriguing mode of communication as it applies to a wide variety of species ranging from bacteria to insects and mammals, including humans. Essential concepts of organic chemistry and biology will be introduced and illustrated. Each student will be expected to prepare a term paper, and there will be an opportunity for oral presentation of some of these papers for class discussion.]

**251 Introduction to Experimental Organic Chemistry**

Fall or summer. 2 credits. Recommended for non-chemistry majors. Enrollment limited. Prerequisites: Chemistry 208 and coregistration in Chemistry 253 or 357; or Chemistry 104 and 253 with a grade of C or better. Students who have taken Chemistry 104 must complete Chemistry 253 before taking Chemistry 251.

Lec, M or F 8:00 (all students attend first lecture); lab, M T W R or F 1:25–4:25, or T or R 8–11. Prelims: 7:30–9 p.m., Oct. 11, Nov. 15. T. Frey.

Introduction to the synthesis, separation, and handling of materials, including applications of many types of chromatography, simple and fractional distillation, crystallization, extraction, and others.

**252 Elementary Experimental Organic Chemistry**

Spring or summer. 2 credits. Recommended for non-chemistry majors. Prerequisite: Chemistry 251.

Lec, M 8:00; lab, M T W or R 1:25–4:25. Prelims: 8 a.m., March 4, April 15. T. Frey.

A continuation of Chemistry 251.

**253 Elementary Organic Chemistry**

Fall or summer. 4 credits. Primarily for students in the premedical and biological curricula. Prerequisite: Chemistry 104 with grade of C or better or Chemistry 208 or 216.

Lecs, M W F 10:10. Prelims: 7:30–9 p.m., Sept. 27, Oct. 25, Nov. 13. D. A. Usher.

The occurrence and properties of organic molecules and the mechanisms of organic reactions, including a brief introduction to the organic chemistry of biological systems.

*Note:* Because of duplication of material, students are not permitted to earn both 4 credits for Chemistry 253 and 3 credits for Chemistry 357. In special situations (consult instructor for details), students should take Chemistry 255 for 2 credits after having earned 3 credits for Chemistry 357. Students may earn 6 credits by taking Chemistry 251–253 or 8 credits by taking Chemistry 253–301 or 253, 251, and 252.

**255 Elementary Organic Chemistry**

Fall or summer. 2 credits. Same course as Chemistry 253, but to be taken for reduced credit by students already having 3 credits for Chemistry 357.

**287–288 Introductory Physical Chemistry**

287, fall; 288, spring. 3 credits each term.

Prerequisites: Chemistry 208 or 216 and Mathematics 111–112, or permission of instructor. Prerequisite for Chemistry 288: Chemistry 287.

Lecs, M W F 9:05; rec, M or W 1:25, T 9:05. Prelims: 7:30–9 p.m., Oct. 2, Nov. 6, Dec. 4. 288.1, Feb. 14, March 12, April 18; 288.2, Feb. 14, March 28, April 25. Fall: R. Loring; spring: B. A. Baird, to be announced.

A systematic treatment of the fundamental principles of physical chemistry. In the spring there will be two lectures; lecture 02 will be oriented to the application of physical chemistry to biological systems. Chemistry 287 satisfies the minimum requirement for physical chemistry in the alternate chemistry major.

**289–290 Introductory Physical Chemistry Laboratory**

289, fall; 290, spring. 2 credits each term.

Prerequisite for Chemistry 290: Chemistry 289. Corequisite: registration in Chemistry 287–288.

Lec R 8 a.m.; lab, M T W R 1:25–4:25. Prelims: 8 a.m., fall: H. A. Scheraga; spring: T. McCarrick.

Quantitative and qualitative methods basic to the experimental study of physical chemistry.

**300 Quantitative Chemistry**

Fall. 2 credits. Prerequisite: Chemistry 208 or advanced placement in chemistry.

Lec, F 12:20; lab, M T W R 12:20–4:25 or R 8–12. Lab includes one-hour rec. Prelims: 12:20, Oct. 12, Nov. 30. G. H. Morrison.

Gravimetric, volumetric, spectrophotometric, and potentiometric methods are emphasized. Lectures and problem sets stress the relationship between theory and applications.

**301 Experimental Chemistry I**

Spring. 4 credits. Prerequisites: Chemistry 216 or 300, and 253 or 357 or 359. Concurrent registration in Chemistry 253 is not recommended.

Lecs, M W F 8; 2 labs, M W 1:25–4:25 or T R 8–11 or 1:25–4:25. Prelims: 8 a.m., Feb. 27, April 3. T. P. Begley.

An introduction to the techniques of synthetic chemistry. A representative selection of the most important classes of organic reactions will be explored in the laboratory. The theoretical basis for these reactions and for the separation techniques used will be discussed in the lectures.

**302 Experimental Chemistry II**

Fall. 4 credits. Enrollment limited; preference given to chemistry majors. Prerequisite: Chemistry 301.

Lecs, M W F 9:05; 2 labs, M W 1:25–4:25, or T R 1:25–4:25. C. F. Wilcox.

Instrumental methods of analysis, including optical spectroscopy, atomic absorption, NMR, mass spectrometry, gas chromatography, IR/GC/MS, and electrochemical methods.

**303 Experimental Chemistry III**

Spring. 4 credits. Each lab limited to 24 students. Prerequisites: Chemistry 302, 389, 390; coregistration in the latter is permissible.

Lecs, M W F 9:05; 2 labs, M W 1:25–4:25 or T R 1:25–4:25. A. Kuki.

An introduction to measurement strategies in physical chemistry as applied to kinetics, spectroscopy, the dynamics of photo-excited states, and the dielectric properties of matter. The principles and assembly of electronic, optic, computer, and vacuum line equipment will be studied. A familiarity with computer programming is assumed.

**357–358 Introductory Organic Chemistry**

357, fall; 358, spring. 3 credits each term.

Prerequisite for Chemistry 357: Chemistry 208 or 216 or advanced placement; recommended: concurrent registration in Chemistry 251 or 300. Prerequisite for Chemistry 358: Chemistry 357; recommended: concurrent registration in Chemistry 252 or 301.

Lecs, M W F 9:05; optional rec may be offered. Prelims: 7:30–9 p.m., Sept. 27, Oct. 25, Nov. 13, Feb. 14, March 14, April 18. Fall: D. Collum; spring: B. Ganem.

A systematic study of the more important classes of carbon compounds—reactions of their functional groups, methods of synthesis, relations, and uses.

*Note:* Because of duplication of material, students are not permitted to earn both 4 credits for Chemistry 253 and 3 credits for Chemistry 357. In special situations (consult instructor for details), students should take Chemistry 255 for 2 credits after having earned 3 credits for Chemistry 357. Students will not be permitted to take Chemistry 358 after completing Chemistry 253.

**359–360 Organic Chemistry I and II**

359, fall; 360, spring. 4 credits each term.

Recommended for students who intend to specialize in chemistry or closely related fields. Enrollment limited. Prerequisites: Chemistry 216 with a grade of B or better, Chemistry 208 with a grade of A or better, or permission of instructor. Prerequisite for Chemistry 360: Chemistry 359. Recommended: coregistration in Chemistry 300–301–302.

Lecs, M W F 9:05; makeup lec, W 7:30 p.m. Prelims: 9:05 a.m., Sept. 26, Oct. 26, Nov. 28, Feb. 22, April 5. Fall:

B. K. Carpenter; spring: J. M. J. Frechet.

A rigorous and systematic study of organic and organometallic compounds, their structures, the mechanisms of their reactions, and the ways they are synthesized in nature and in the laboratory.

**389–390 Physical Chemistry I and II**

389, fall; 390, spring. 4 credits each term.

Prerequisites: Mathematics 213 or, ideally, 221–222; Physics 208; Chemistry 208 or 216 or permission of instructor. Prerequisite for Chemistry 390: Chemistry 389.

Lecs, M W F 10:10; makeup lec, W 7:30 p.m. Prelims: 7:30–9 p.m., Oct. 4, Nov. 8, Dec. 4, Feb. 19, March 28, April 25.

Fall: A. C. Albrecht; spring: L. A. Philips.

The principles of physical chemistry are studied from the standpoint of the laws of thermodynamics, kinetic theory, statistical mechanics, and quantum chemistry.



**405 Techniques of Modern Synthetic Chemistry**

Spring. 3 or 6 credits. Enrollment limited. Prerequisites: Chemistry 302 and permission of instructor. Selection of students will be based on grades in Chemistry 301 and 302. To receive three credits, students must perform a minimum of three two-week experiments. Six credits will be given for three additional experiments. Completion of five exercises in elementary glass-blowing will count as one experiment.

Lab time required: 16 hours each week, including at least two 4-hour sessions in one section (M W 1:25). First meeting will be at 1:30 on first class day of semester. Lec, first week only, at times to be arranged. J. M. Burlitch.

The syntheses of complex organic, organometallic, and inorganic molecules are carried out with emphasis on the following techniques: vacuum line, high pressure, high-temperature solid state, inert atmosphere, nonaqueous solvents, radioactive labeling, sol-gel, photochemical and electrochemical methods, solid phase peptide synthesis, and polymer synthesis. Elementary glassblowing.

**410 Inorganic Chemistry**

Spring. 4 credits. Prerequisites: Chemistry 358 or 360, and 389.

Lecs, M W F 11:15. B. K. Carpenter. A systematic study of the synthesis, structure, and reactivity of inorganic and organometallic compounds.

**421 Introduction to Inorganic Research**

Fall or spring. 2-4 credits. Prerequisites: Chemistry 303 and 389-390, or Chemistry 287-288, and Chemistry 289-290 with an average of B- or better, or permission of instructor. Selected faculty. Research in inorganic chemistry involving both laboratory and library work, planned in consultation with a faculty member.

**433 Introduction to Analytical Research**

Fall or spring. 2-4 credits. Prerequisites: Chemistry 303 and 390 with an average of B- or better or permission of instructor. Selected faculty. Research in analytical chemistry involving both laboratory and library work, planned in consultation with a faculty member.

**461 Introduction to Organic Research**

Fall or spring. 2-4 credits. Prerequisites: Chemistry 302 and 358 or 360 with a grade of B- or better or permission of instructor. Selected faculty. Research in organic chemistry involving both laboratory and library work, planned in consultation with a faculty member.

**477 Introduction to Physical Chemistry Research**

Fall or spring. 2-4 credits. Prerequisite: Chemistry 390 with an average of B- or better or permission of instructor. Selected faculty. Research in physical chemistry involving both laboratory and library work, planned in consultation with a faculty member.

**498 Honors Seminar**

Spring. No credit. Admission by departmental invitation. Additional prerequisites or corequisites: outstanding performance in either (1) two coherent 4-credit units of research in a course such as Chemistry 421, 433, 461, or 477; or (2) one 4-credit unit in a course such as Chemistry 421, 433, 461, or 477 and summer research equivalent to at least 4 credits in the same subject.

W 2:30-4. G. H. Morrison.

Informal presentations and discussions of selected topics in which all students participate. Individual research is on advanced problems in chemistry or a related subject under the guidance of a faculty member, culminating in a written report.

**600-601 General Chemistry Colloquium**

600, fall; 601, spring. No credit. Required of all graduate students except those majoring in organic or bioorganic chemistry. Juniors and seniors are encouraged to attend.

R 4. Instructor to be announced.

A series of talks representative of all fields of current research interest in chemistry other than organic chemistry, given by distinguished visitors and faculty members.

**605 Advanced Inorganic Chemistry I: Symmetry, Structure, and Reactivity**

Fall. 4 credits. Prerequisite: Chemistry 389-390 or equivalent or permission of instructor.

Lecs, M W F 11:15. J. M. Burlitch.

Group theory applications: hybrid orbitals, molecular orbitals, molecular vibrations, and ligand field theory; at the level of Cotton's *Chemical Applications of Group Theory*. Selected topics in structure, bonding, and reactivity of inorganic compounds with emphasis on main group elements; at the level of *Chemistry of the Elements*, by Greenwood and Earnshaw.

**606 Advanced Inorganic Chemistry II: Synthesis, Structure, and Reactivity of Inorganic and Organotransition Metal Compounds**

Fall. 4 credits.

Lecs, M W F 10:10. P. T. Wolczanski.

Synthesis, structure, and reactivity of coordination compounds and organometallic complexes. Emphasis on bonding models, structure, and reactivity, including the elucidation of mechanisms. Readings at the level of Purcell and Kotz's *Inorganic Chemistry*, and Collman, Hegedus, Finke, and Norton's *Principles and Applications of Organotransition Metal Chemistry*.

**607 Advanced Inorganic Chemistry III: Solid-State Chemistry**

Spring. 4 credits. Prerequisite: Chemistry 605 or permission of instructor.

Lecs, M W F 12:20. F. J. DiSalvo.

The third of a three-term sequence. Interdisciplinary approach to solids. Topics include solid-state structure and X-ray diffraction, synthesis methods, defects in solids, phase diagrams, electronic structure, and chemical and physical properties of solids. Text: *Solid State Chemistry and Its Applications*, by West. Readings from inorganic chemistry and solid-state physics texts.

**[622 Chemical Communication (also Biological Sciences 623)]**

Fall. 3 credits. Limited to 30 students.

Prerequisites: Chemistry 358 or 360 and Biological Sciences 102. Intended primarily for research-oriented students. Offered alternate years. Not offered 1990-91.

Lecs, M W F 1:25. J. Meinwald, T. Eisner. The production, transmission, and reception of chemical signals in communicative interactions of animals, plants, and microorganisms. Communication involving insects is emphasized. Specific topics are treated, with varying emphasis on chemical, biochemical, neurobiological, ecological, and evolutionary principles.]

**625 Advanced Analytical Chemistry I**

Fall. 4 credits. Prerequisite: Chemistry 288 or 390 or equivalent.

Lecs, M W F 8; problem sessions, T 7:30 p.m. C. F. Wilcox, F. W. McLafferty.

The application of molecular spectroscopy to chemical problems. Topics in infrared, NMR, and mass spectroscopy are discussed.

**[627 Advanced Analytical Chemistry II]**

Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 or equivalent. Not offered 1990-91.

Lecs, T R 10:10; problem sessions and exams, T 7:30 p.m. F. W. McLafferty.

Modern analytical methods for molecular characterizations, including electron, Mossbauer, and Fourier spectroscopy; mass spectrometry; methods applicable to macromolecules; information theory.]

**[628 Advanced Analytical Chemistry III]**

Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 or equivalent. Not offered 1990-91.

Lecs, T R 10:10. G. H. Morrison.

Modern trace, micro, and surface methods of analysis, including atomic spectrometry, solid mass spectrometry, activation analysis, microscopes, microprobes, and electron spectroscopy.]

**[629 Electrochemistry]**

Fall. 3 credits. Primarily for graduate students and upperclass undergraduates. Prerequisite: Chemistry 390 or equivalent (Mathematics 213 helpful). Not offered 1990-91.

Lecs, T R 8:40-9:55. H. D. Abruna.

Fundamentals and applications of electrochemistry. Topics will include the fundamentals of electrode kinetics, electron transfer theory, the electrical double layer, and diffusion. A wide range of techniques and their application as well as instrumental aspects will be covered.]

**650-651 Organic and Organometallic Chemistry Seminar**

650, fall; 651, spring. No credit. Required of all graduate students majoring in organic or bioorganic chemistry. Juniors and seniors are encouraged to attend.

M 4. T. Begley.

A series of talks representative of all fields of current research interest in organic and organometallic chemistry, given by research associates, faculty members, and distinguished visitors.

**665 Advanced Organic Chemistry**

Fall. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisites: Chemistry 253 or 358 or 360, and 390 or equivalents or permission of instructor.

Lecs, M W F 12:20. B. Ganem.

A survey of reaction mechanisms and reactive intermediates in organic chemistry.

**666 Synthetic Organic Chemistry**

Spring. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisite: Chemistry 665 or permission of instructor.

Lecs, T R 8-9:30. D. Collum

Modern techniques of synthesis; applications of organic reaction mechanisms to the problems encountered in rational multistep synthesis, with particular emphasis on modern developments in synthesis design.

**[668 Chemical Aspects of Biological Processes**

Fall. 4 credits. Prerequisite: Chemistry 358 or 360 or equivalent. Not offered 1990-91.

Lecs, T R 8:30-10. T. P. Begley.

A representative selection of the most important classes of enzyme-catalyzed reactions will be examined from a mechanistic perspective. Topics discussed will include the chemical basis of enzymatic catalysis, techniques for the elucidation of enzyme mechanism, cofactor chemistry, the biosynthesis of penicillin, chlorophyll, methane, terpenes, amino acids, and the biodegradation of lignin and a variety of pollutants. The application of chemical principles to understanding biological processes will be emphasized.]

**671 Synthetic Polymer Chemistry (also Materials Science and Engineering 671 and Chemical Engineering 675)**

Fall. 4 credits. Prerequisite: Chemistry 359-360 or equivalent or permission of instructor; recommended: Materials Science and Engineering 620.

Lecs, T R 8:30-10. J. M. J. Frechet.

Modern concepts in synthetic polymer chemistry. The application of organic synthesis to the development of new polymers and copolymers and the control of their architecture. Chain and step-growth polymerizations, reactions of polymers, block and graft copolymers. A broad spectrum of applications from recent literature will also be discussed.

**[672 Kinetics and Regulation of Enzyme Systems**

Fall. 4 credits. Primarily for graduate students in Chemistry and Biochemistry. Prerequisite: Chemistry 390, Biological Sciences 331, or equivalents or permission of instructor. Not offered 1990-91.

Lecs, M W F 9:05, and occasionally W 7 p.m. B. A. Baird.

Protein structure and dynamics; thermodynamics and kinetics of ligand binding; steady state and transient enzyme kinetics; enzyme catalysis and regulation; role of plasma membrane receptors in regulating cellular activities.]

**[677 Chemistry of Nucleic Acids**

Spring. 4 credits. Primarily for graduate students. Prerequisites: Chemistry 358 or 360, and 390 or equivalents. S-U grades only. Not offered 1990-91.

Lecs, M W 10-11:10. D. A. Usher.

Properties, synthesis, reactions, and biochemical reactions of nucleic acids.]

**678 Thermodynamics**

Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 or equivalents.

Lecs, T R 8:30-9:55. P. L. Houston.

Principles of equilibrium thermodynamics. Thermodynamic functions; First and Second Laws; gases and condensed phases; solutions; phase equilibrium; chemical equilibrium;

surface thermodynamics; electrolytes; statistical thermodynamics and the Third Law.

**681 Physical Chemistry III**

Fall. 4 credits. Prerequisites: Chemistry 288 or 390; Mathematics 213 and Physics 208; or equivalents.

Lecs, M W F 10:10. R. F. Porter.

An introduction to the principles of quantum theory and statistical mechanics, atomic and molecular spectra, and elementary valence theory. At the level of *Quantum Chemistry*, by Levine.

**686 Physical Chemistry of Proteins**

Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 or equivalents. S-U grades. Letter grades for undergraduates. Offered alternate years.

Lecs, M W F 8, and occasionally W 7:30 p.m. H. A. Scheraga.

Chemical constitution, molecular weight, and structural basis of proteins; thermodynamic, hydrodynamic, optical, spectroscopic, and electrical properties; protein and enzyme reactions; statistical mechanics of helix-coil transition in biopolymers; conformation of biopolymers; protein folding.

**700 Baker Lectures**

Fall, on dates to be announced. No credit. Distinguished scientists who have made significant contributions to chemistry present lectures for periods varying from a few weeks to a full term. This year's lecturer: R. Noyori, Na Goya Univ., Japan.

**701-702 Introductory Graduate Seminar in Analytical, Inorganic, and Physical Chemistry**

701, fall; 702, spring. No credit. Required of all first-year graduate students majoring in analytical, inorganic, physical, theoretical, and biophysical chemistry.

Hours to be arranged. H. D. Abruña.

**[716 Selected Topics in Advanced Inorganic Chemistry: Transition Metal Oxides (also Materials Science and Engineering 716)**

Fall. 3 credits. Prerequisite: some elementary knowledge of chemistry and bonding. Not offered 1990-91.

Lecs, M W F 9:05.

This course will cover a range of properties of transition metal oxides. It will include a survey of their structure and synthesis and their defect and surface chemistry. Bonding and physical and materials properties, especially those relating to electronic structure, will be emphasized, i.e., optical and magnetic properties, metal-insulator transitions, and superconductivity. The course will have a strong interdisciplinary flavor and should be of interest to solid-state and surface chemists, physicists, and materials scientists at the graduate-student and postdoctoral level.]

**745 Physical Polymer Science I (also Chemical Engineering 745)**

Fall. 3 credits. Prerequisite: a graduate-level thermodynamics statistical course.

Lecs, to be arranged. C. Cohen.

Thermodynamic properties of dilute, semidilute, and concentrated solutions from both classical and scaling approaches. Characterization techniques of dilute solutions: osmometry, light scattering, viscometry, and sedimentation. Rubber elasticity; mechanical and thermodynamic properties of gels. Polymer melts: equations of state and glass transition phenomenon.

**[746 Physical Polymer Science II (also Chemical Engineering 746)**

Fall. 3 credits. Prerequisite: a graduate level thermodynamics statistical course. Not offered 1990-91.

Lecs, T R 10-11:15. C. Cohen

Rheology and processing. Applications and limitations of various rheometers. Linear viscoelasticity; non-linear continuum models; kinetic theory of polymeric liquids. Pressurization, pumping, and the modelling of processing machines. Injection and compression molding; mold filling, simulations, structure, and orientation.]

**[762 Special Topics in Organic Chemistry**

Spring. 3 credits. Not offered 1990-91.

Lecs, M W F 9:05.

Topics vary.]

**765 Physical Organic Chemistry I**

Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 665 or permission of instructor.

Lecs, M W F 10:10. C. F. Wilcox.

Emphasis is on applications of reaction kinetics and isotope effects to gain an understanding of reaction mechanisms.

**[766 Physical Organic Chemistry II**

Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 765 or permission of instructor. Not offered 1990-91. Quantitative aspects of organic chemistry.]

**[774 Chemistry of Natural Products**

Fall. 3 credits. Primarily for graduate students. Prerequisites: Chemistry 665-666. Not offered 1990-91.

Lecs, T R 12:20.

Particular attention is devoted to methods of structure determination and synthesis as applied to selected terpenes, steroids, alkaloids, and antibiotics.]

**780 Principles of Chemical Kinetics**

Fall. 4 credits. Prerequisite: Chemistry 681 or permission of instructor.

Lecs, M W F 9:05. B. A. Baird.

Principles and theories of chemical kinetics; special topics such as fast reactions in liquids, enzymatic reactions, energy transfer, and molecular beams.

**[782 Special Topics in Biophysical and Bioorganic Chemistry**

Spring. 3 credits. Not offered 1990-91.

Lecs, T R 11:15.

Topics vary from year to year.]

**[789 X-ray Crystallography**

Spring; offered only when sufficient registration warrants. 4 credits. Prerequisite: Chemistry 288 or 390 or permission of instructor. Not offered 1990-91.

M W F 10:10. G. VanDyne.

A beginning course in the application of X-ray crystallography to structural chemistry. Topics include symmetry properties of crystals, diffraction of X-rays by crystals, interpretation of diffraction data, and refinement of structures. The chemical information available from a diffraction experiment is stressed, and theoretical aspects are illustrated by conducting an actual structure determination as a classroom exercise. At the level of Ladd and Palmer's *Structure Determination by X-ray Crystallography*.]

**791 Spectroscopy**

Fall. 4 credits. Prerequisite: Chemistry 793.

Lecs, M W F 10:10. L. A. Philips.

The course will explore the interaction of light with matter. We will start with the quantum mechanical foundations of spectroscopy and follow with a detailed treatment of a variety of different spectroscopies, including the study of rotation, rotation and vibration, and electronic spectra for simple molecules as well as polyatomics. As time and interest allow, we will cover special topics such as magnetic resonance, non-linear, and molecular beam spectroscopies.

**792 Molecular Collision Theory**

Spring. 3 credits.

Lecs, T R 10:10–11:25. G. S. Ezra.

The concepts and methods of scattering theory are described with particular emphasis on applications to problems of chemical interest. At the level of Child's *Molecular Collision Theory* and Taylor's *Scattering Theory*.

**793 Quantum Mechanics I**

Fall. 4 credits. Prerequisites: Chemistry 681, coregistration in Mathematics 421, and Physics 431 or equivalents or permission of instructor.

Lecs, M W F 11:15. G. S. Ezra.

Schrodinger's equation, wave packets, uncertainty principle, WKB theory, matrix mechanics, orbital and spin angular momentum, exclusion principle, perturbation theory, variational principle, Born-Oppenheimer approximation. At the level of Cohen-Tannoudji's *Quantum Mechanics*.

**794 Quantum Mechanics II**

Spring. 4 credits. Prerequisites: Chemistry 793 or equivalent and coregistration in Physics 432 and Mathematics 422, or permission of instructor.

Lecs, M W F 9:05. A. C. Albrecht.

Electronic structure of atoms and molecules. Quantum chemical calculations. Group theory. Time-dependent phenomena in quantum mechanics and light/matter interaction. Spectroscopies. At the level of Weissbluth's *Atoms and Molecules* and Sakurai's *Modern Quantum Mechanics*.

**796 Statistical Mechanics**

Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 793 or equivalent.

Lecs, T R 8:30–9:55. R. Loring.

Microstates, ensembles, partition functions, and fluctuations. Quantum statistics. Thermodynamic properties of ideal gases and crystals. Chemical equilibrium. Dense gases. Structure of classical liquids. Phase transitions and critical phenomena. Introduction to nonequilibrium statistical mechanics: density matrix and response theory, transport processes, Brownian motion. At the level of *Statistical Mechanics*, by McQuarrie.

**[798 Selected Topics in Physical Chemistry]**

Spring. 3 credits. Prerequisite: Chemistry 793 or equivalent; Chemistry 794 recommended but not essential. Not offered 1990–91.

Lecs, T R 10:10–11:25. R. Hoffmann.

Topics vary.]

**CHINESE**

See Modern Languages and Linguistics.

FALCON Program: 255–6457; C. Shih, 213 Morrill Hall, 255–4230; J. Wheatley, 416 Morrill Hall, 255–9301.

**CLASSICS**

A. Nussbaum, chair (on leave 1990–91); L. S. Abel, F. M. Ahl (graduate faculty representative), K. Clinton, J. E. Coleman (on leave 1990–91), G. Davis, J. C. DeFilippo, J. R. Ginsburg, I. Hohendahl, G. M. Kirkwood (emeritus), H. Koliass, P. I. Kuniholm, D. Mankin (director of undergraduate studies), G. M. Messing (emeritus), C. Minkowski, P. T. Mitsis, H. Pelliccia, P. Pucci (acting chair), J. S. Rusten, D. Shanzer, J. Whitehead

Erich S. Gruen, Townsend Lecturer

Cornell University has long recognized the importance of studying the civilizations of ancient Greece and Rome. Particularly in an age of increasing specialization, study of the Classics is widely viewed as an excellent means of acquiring a liberal education; at Cornell, we are deeply interested in the continuing humanistic values contained in the literature of the ancient world and in gaining a fuller understanding of these important cultures and their imprint upon subsequent ages.

The Department of Classics at Cornell is one of the oldest and largest in the country. With eighteen faculty members, together with professors of related interests in the departments of History, Philosophy, Comparative Literature, History of Art, Architecture, Modern Languages and Linguistics, and Near Eastern Studies and in the Archaeology and Medieval Studies programs, the range of instruction available is very large, including not only the traditional study of language, literature, and ancient history, but also newer developments in the field, such as comparative study of Mediterranean civilizations and modern literary theory.

Although Classics, like other areas of humanistic study, does not aim at providing specific preprofessional training, over the years Classics majors from Cornell have gone on to a wide variety of careers: in law, teaching, medicine, diplomacy, management, educational administration, government, and many others.

The department offers courses in Bronze Age and Classical archaeology and is active in field archaeology in Classical lands. It recently sponsored an archaeological excavation at Alambra, in Cyprus, which served as a field training school for Cornell undergraduate and graduate students, and plans are under way for further excavation projects. On campus there are also collections of ancient artifacts, reproductions of ancient sculpture, and one of the few laboratories in the world to concentrate on the tree-ring dating of ancient monuments from Greece, Cyprus, and Turkey. The archaeology courses may be used to satisfy some of the requirements for the Intercollegiate Program in Archaeology or for the major in Classical civilization. They require no knowledge of either Greek or Latin. Similarly, the department offers a variety of courses and seminars in English on such subjects as Greek mythology, Greek and Roman mystery religions, early Christianity, and Roman law, as well as ancient epic, tragedy, history, and

philosophy. For those whose interest in things Greek and Roman extends no further than a desire to understand the English language a little better, the department offers one course in the Greek and Latin elements that make up a huge proportion of the vocabulary of Modern English, and another that deals more specifically with the Greek and Latin ingredients of bioscientific vocabulary. Programs in Greek and Latin at the elementary level are also offered, of course; and for the more ambitious there are courses involving reading, in the original, of Greek and Latin authors from Homer to St. Augustine and Bede and, periodically, the Latin works of Dante, Petrarch, and Milton. The department makes every attempt to adapt its program to the needs of each student. If there is a Classical writer you would like to study, the department will do its best to help you do so whether you are a major in the department or not.

**Majors**

The Department of Classics offers majors in Classics, Greek, Latin, and Classical Civilization.

**Classics**

Those who major in Classics must complete 24 credits in advanced Greek or Latin (numbered 201 or above) and 15 credits in related subjects selected in consultation with the adviser.

**Classical Civilization**

Those who major in Classical Civilization must complete (a) qualification in Latin and Greek or proficiency in either; (b) 24 credits selected from the courses listed under Classical civilization, Classical archaeology, Latin, and Greek; and (c) 15 credits in related subjects (courses in the humanities selected in consultation with the adviser).

**Greek**

Those who major in Greek must complete 24 credits of advanced courses in Greek and 15 credits in related subjects (including Latin).

**Latin**

Requirements for the major in Latin parallel those of the major in Greek.

Honors. Candidates for the degree of Bachelor of Arts with honors in Classics, Greek, Latin, or Classical civilization must fulfill the requirements of the appropriate major study as given above and must also successfully complete the special honors courses 370, 471, and 472. Credit for honors courses may be included in the credits required for the major study. Students who wish to become candidates for honors, who have a cumulative average of B+ or better, and who have demonstrated superior performance in Classical courses (Greek, Latin, and Classical Civilization), submit an outline of their proposed honors work to the honors committee during the first month of their fifth semester. The chair will appoint a committee of three faculty members for each candidate, and the committee will be responsible for evaluating the candidate's proposal and subsequently supervising his or her work. At the completion of the honors thesis, which must demonstrate knowledge of the main bibliographical sources, give promise of scholarly talent, and show creativity, the committee will determine the level of honors to be awarded.

## Study Abroad

Cornell participates in the Intercollegiate Center for Classical Studies in Rome, which offers courses in Latin, Greek, ancient history, art, archaeology, and Italian. Cornell is a member institution of the American School of Classical Studies at Athens, whose Summer Program is open to graduate students and qualified undergraduates. The American Academy in Rome, of which Cornell is also a member institution, offers full-year and summer programs for qualified graduate students. For graduate students the Department of Classics offers a few travel grants each year from the Townsend Memorial Fund. Detailed information on these programs is available in the Department of Classics Office, 120 Goldwin Smith Hall.

## Summer Support for Language Study

The Beatrice R. Kanders Memorial Scholarship and a certain amount of aid made possible by gifts from the Constantinos C. Polychronis Foundation are normally available to students who want to enroll in Intensive Latin or Greek in the Cornell summer session. These six-week courses are designed to enable students to enter second-year Latin or Greek the following fall. Applications are due to the chair of the Department of Classics by April 12.

## Placement in Latin

Placement of first-year students in Latin courses is determined by an examination given by the Department of Classics during orientation week or, if necessary, in the second half of the fall term.

## Freshman Writing Seminars

These courses are offered as freshman writing seminars and as freshman electives but may not be used to satisfy the humanities distribution requirement. Consult John S. Knight Writing Seminar Program brochures and the summer session catalog for times, instructors, and descriptions.

**109 The Art of Argument: An Introduction to Rhetoric (also English 109)**  
Summer. 3 credits.

**113 Word Power: Greek and Latin Elements in the English Language**  
Summer. 3 credits.

**114 Word Power for the Biological Sciences**  
Summer. 3 credits.

**120 Latin Literature**  
Fall or spring. 3 credits.

**121 Classical Archaeology**  
Fall or spring. 3 credits.

**123 Comedy**  
Summer. 3 credits.

**125 Tragedy**  
Fall. 3 credits.

**126 The Trojan War**  
Fall. 3 credits.

**150 Greek and Roman Myths**  
Fall or spring. 3 credits.

## Classical Civilization

**100 Word Power: Greek and Latin Elements in the English Language**  
Fall. 3 credits.

M W F 10:10. I. Hohendahl.

This course gives the student with no knowledge of Classical languages an understanding of how the Greek and Latin elements that make up over half our English vocabulary operate in both literary and scientific English usage. Attention is paid to how words acquire their meaning and to enlarging each student's working knowledge of vocabulary and grammar.

**102 Word Power for the Biological Sciences**

Summer. 3 credits. H. Roisman.

A study of the Greek and Latin word elements that combine to form most of the specialized terms in the biological sciences. The student who learns the meanings of those elements and the rules of word formation usually can recognize the basic meaning of any unfamiliar word in that field. The class also gives attention to misformations and words still in use that reflect outmoded scientific theories.

**200 Classical Civilization**

Summer. 3 credits.

F. Ahl.

Readings in translation from the *Iliad*, the *Odyssey*, the *Aeneid*, and Greek and Roman drama, oratory, and history. An encounter with the texts that have shaped our humanistic tradition.

**211 The Greek Experience**

Fall. 3 credits.

M W F 11:15. F. Ahl.

An introduction to the literature and thought of ancient Greece. Topics will include epic and lyric poetry, tragedy and comedy, and historical, political, philosophical, and scientific writings. Some attention will also be given to the daily life of ordinary citizens, supplemented by slides of ancient art and architecture.

**212 The Roman Experience**

Spring. 3 credits.

M W F 1:25. D. Mankin.

An introduction to the civilization of the Romans as expressed in their literature, art, and social and political institutions. This course will examine not only the intellectual life of the Romans but what it meant for men and women of all social classes to live in the Roman world. Selected readings in translation of works of literature, history, and philosophy, supplemented by slides and other visual materials.

**215 Conquerors and Conquered: The Case of the Romans, Jews, and Greeks**

Summer. 3 credits.

J. Roisman.

Romans, Jews, and Greeks: How did they first come into contact (and conflict) with each other? How did they view each other? What were their values, beliefs, and ambitions? Were they too different to allow peaceful coexistence? The course takes us from Alexander the Great to Masada, exploring the written accounts of their contacts and even their role in the creation of a new religion.

## 217-218 Initiation to Greek and Roman Cultures

Limited to 18 students. These courses are intended especially for freshmen (a few exceptionally motivated sophomores or upperclass students may be accepted) and may be taken independently of one another. Apply in writing to the chair, Department of Classics, 120 Goldwin Smith Hall.

Knowledge of Greek or Latin is not necessary, since all texts are in translation. What is necessary is the willingness to participate in three one-hour seminars each week and also a supplementary one-hour (occasionally two-hour) session, during which the class will participate in workshops with specially invited guests.

**217 Initiation to Greek Culture**

Fall. 4 credits.

M W F 10:10, plus one hour to be arranged.  
P. Mitsis, P. Pucci.

This year's course will focus on Greek tragic drama and its relation to the Greek sophistic enlightenment. It will involve the analysis of individual tragedies as well as a close reading of some seminal criticism by thinkers such as Aristotle, Hegel, Nietzsche, and Derrida. We also will survey some selected modern productions of Greek tragedy on film and discuss problems that arise in the performance of Greek tragedy.

**218 Initiation to Roman Culture: Rome and Anti-Rome**

Spring. 4 credits.

M W F 10:10, plus one hour to be arranged. F. Ahl, J. Whitehead.

In this course two professors, an archaeologist and a literary critic, give an overview of the Roman Empire and of modern attitudes toward it, by discussing selected places, themes, and works of art and literature. We start with visual images, the amphitheater, for example, and consider not only their importance as cultural and artistic statements but how they come to symbolize in literature and religious controversy the magnificence and decadence of Roman power. Similarly, we examine the poetry and official monuments (Trajan's column and the great triumphal arches). Other topics include Roman attitudes to non-Romans, daily life and domestic art as seen in the ruins of Pompeii and Herculaneum, and the literature and art of political and religious dissent.

**223 The Comic Theater (also Comparative Literature 223)**

Spring. 3 credits. Students may not obtain credit for both this course and Classics 123.

M W F 12:20. J. Rusten.

The origins of comic drama in ancient Greece and Rome, and its subsequent incarnations especially in the Italian renaissance (*Commedia erudita* and *Commedia dell'arte*), Elizabethan England, seventeenth-century France, the English Restoration, and Hollywood in the thirties and forties. Chief topics will be: the growth of the comic theatrical tradition and conventions; techniques and themes of comic plots (trickster, parody, farce, caricature); and the role of comedy in society. All readings in English.

**[224 Greek Philosophy**

Fall. 3 credits. Not offered 1990-91.

An introduction to the pre-Socratic philosophers and Plato.]



**[225 Hellenistic and Roman Philosophy]**  
Spring. 4 credits. Not offered 1990–91.  
P. Mitsis.

An introduction to late Greek and Roman philosophy, including Epicureans, Stoics, and Skeptics. Topics include philosophy of language and epistemology, materialism, personal identity, free will and necessity, and ethical naturalism.]

**235 Modern Greek Poetry and Politics (also Comparative Literature 235 and Government 335)**

Fall. 3 credits.

T R 1:25–2:40. G. Holst-Warhaft.

The history of modern Greece has been marked by a series of political crises that have resulted in deep divisions in society. Greek poetry has reflected these crises and divisions, and in this course the poetry of nineteenth- and twentieth-century Greece will be interpreted in its historical and political context. The course will concentrate on four periods in which there has been a particularly strong interaction. The continuity of ancient Greek myths in modern Greek poetry will also be explored. Students taking this course as Government 335 for 4 credits must write an additional paper on a political topic.

**236 Greek Mythology (also Comparative Literature 236)**

Fall or summer. 3 credits.

Fall: T R 11:40–12:55. D. Mankin.

A survey of the Greek myths, with emphasis on the content and significance of the myths in Mediterranean society, including the place of myth in Greek life and consciousness; the factors and influences involved in the creation of myths; and the use of myths for our understanding of Greek literature, religion, and moral and political concepts.

**[237 Greek Religion and Mystery Cults]**  
Spring. 3 credits. Not offered 1990–91.

T R 11:40–12:55. K. Clinton.

Greek religion constitutes one of the essential features of ancient Greek civilization and distinguishes it from later Western civilization. Since religion permeates Greek culture, including the major art forms (epic poetry, tragedy, comedy, architecture, painting, and sculpture), the course will investigate the interaction of religion with these forms—an investigation that is fruitful both for the understanding of Greek religion and the forms themselves, some of which, like tragedy, originated in cult. A representative variety of cults and their history will be studied with special emphasis on mystery cults, such as the Eleusinian mysteries of Demeter and Persephone, the Kabiroti, the Great Gods of Samothrace, and Bacchic rites.]

**[238 The Ancient Epic]**

Spring. 3 credits. Not offered 1990–91.

A reading of the Homeric epics and Vergil's *Aeneid* in translation.]

**239 Greek and Roman Mystery Cults and Early Christianity**

Spring. 3 credits. Prerequisite: Classics 237 or permission of instructor.

Hours to be arranged. K. Clinton.

A study of the controversial question of religious continuity between paganism and early Christianity. After a brief survey of Classical mystery cults and Hellenistic religion, the course will focus on such Hellenistic cults as the mystery cults of Isis, Bacchus, and Attis and the Great Mother and on the distinctive features that contributed to their success.

Discussion of Christian liturgy and beliefs both in the East and the West to determine what Christianity owed to its pagan predecessors and to isolate the factors that contributed to its triumph over the "rival" pagan cults of late antiquity.

**245 Greek and Roman Historians**

Fall. 3 credits.

M W F 9:05. J. Ginsburg.

Study of historical writing in antiquity through selected readings in translation from the Greek and Roman historians. Among topics to be examined are the historian's task as understood by the ancients; the method, narrative technique, and accuracy of the Greek and Roman historians; and their attitudes toward the events that they relate.

**[300 Greek and Roman Drama (also Comparative Literature 300)]**

Spring. 4 credits. Not offered 1990–91.

The tragedies of Aeschylus, Sophocles, and Euripides, read in translation. The main emphasis will be on the form of the dramas and on their meaning in the fifth century B. C. and today.]

**[333 Latin Foundations of Western Literature (also Comparative Literature 333)]**

Spring. 4 credits. Not offered 1990–91.]

**[336 Foundations of Western Thought (also Comparative Literature 336)]**

Fall. 4 credits. Not offered 1990–91.

P. Mitsis.]

**[337 Ancient Philosophy of Science]**

Spring. 4 credits. Not offered 1990–91.]

**[339 Ancient Wit: An Introduction to the Theory and Form of Comic and Satiric Writing in Greece and Rome (also Comparative Literature 339)]**

Fall. 4 credits. Not offered 1990–91.

F. Ahl.

The aim is not only to provide an introduction to the comedy, satire, and other humorous writing in Greek and Roman literature, but to discuss the ancient works in light of modern theories of comedy and laughter. Discussion of the nature of laughter itself in light of both ancient and modern scholarship on the subject, from Plato's *Philebus* to Freud's *Wit and Its Relations to the Unconscious* and Koestler's *The Act of Creation*. Examination of select works and passages of Homer, Euripides, Aristophanes, Hierocles, Lucian, Plautus, Nonnus, Horace, Martial, Juvenal, and Petronius.]

**340 Ancient Greek Constitutions (also Government 360)**

Spring. 4 credits. Prerequisite: one of the following: survey of Greek history, a course in Greek civilization, a course in political theory or comparative politics, or permission of instructor.

T R 8:40–9:55. L. Abel.

The Greek word *politeia* means "constitution," but not a single written document. It means the form of political life within a state. This course will survey briefly the variety of forms of political life in ancient Greece from the time of Homer to the Classical fourth-century Athenian democracy. The majority of time will be devoted to the history, functioning, and assessment of the Athenian democracy and Athenian law. The second major topic will be the constitution of Sparta and its role as the alternative to democracy. As each constitution is studied, the role of women and ideas of justice within the state will be considered.

Required readings will be in translation.

**[363 Representations of Women in Ancient Greece and Rome (also Women's Studies 363)]**

Fall. 4 credits. Not offered 1990–91.

M W 2:30–3:45. L. S. Abel, J. Ginsburg.

Classical authors created and left behind powerful images of women and of what women ought and ought not to be. These writers also provide fleeting insights into the real lives of women in antiquity. In this course, we will examine the ancient evidence in order to trace the origin of some Western attitudes about women and to analyze the assumptions that underlie the representations of women in ancient Greece and Rome. How are these images constructed and how do they work? How can we use the ancient evidence to assess the real lives and social roles of women in antiquity?]

**[382 Greeks, Romans, and Victorians (also Society for the Humanities 382)]**

4 credits. Not offered 1990–91.

F. Ahl.

Modern popular and scholarly views of Greek and Latin literature were shaped in the Victorian years of the nineteenth century, between the years of Republican and Marxist revolution. This course explores some of the ways in which nineteenth-century social and intellectual upheavals, and changes in scholarly techniques and approaches, may have affected how English and Irish writers presented Greco-Roman antiquity and, especially, how they began to discard an idealized past based on a Roman model for one based on a Greek model. The focus will be on poets and dramatists (and a few artists and novelists) rather than on philosophers and scientists. The varied influences of Vergil and Homer, Seneca and Sophocles, Plautus and Aristophanes, Horace, and Greek lyric poetry will be discussed in selected works of writers such as Thomas More, Shelley, Byron, Swinburne, Arnold, Tennyson, W. S. Gilbert, Oscar Wilde, Samuel Butler, and others, including important artists such as Aubrey Beardsley.]

**[390 Comparative Sanskrit Myth and Epic (also Asian Studies 390)]**

Spring. 4 credits. Not offered 1990–91.

T R 1:25–2:40. C. Minkowski.

Readings in translation from the two Sanskrit epics, the *Mahabharata* and the *Ramayana*, and from the main cycles of the *Puranas*, the Sanskrit mythological literature. Special attention will be given to parallels and comparisons with Greek myth and epic, especially Homer and Hesiod. Classics 236 or 238 would be useful as background, but not presupposed.]

**391 Classical Indian Narrative (also Asian Studies 391)**

Spring. 4 credits.

T R 1:25–2:40. C. Minkowski.

Readings in translation from the principal story literature of ancient India. Sources will include the Vedas, the Buddhist Jatakas, the Sanskrit epics, the *Kathasaritsagara*, the *Pancatantra*, and related collections. Attention will be given to comparisons with early Greek narrative, and to the diffusion of Indian narrative through the world's literatures.

**465-466 Independent Study in Classical Civilization, Undergraduate Level**

465, fall; 466, spring. Up to 4 credits.  
Hours to be arranged. Staff.

**480 Roman Society and Politics under the Julio-Claudians**

Spring. 4 credits. Prerequisite: Classics 212, History 268, or permission of instructor.

W 2:30-4:30. J. Ginsburg.

An undergraduate seminar examining several of the important social and political changes in Roman society under Augustus and his successors, the Julio-Claudians. Topics to be investigated include Augustus's consolidation of power through political and social revolution, the Augustan attempt to regulate family life and social relations by legislation, the relation of the emperor Tiberius with the members of the old ruling class, the growth of the imperial bureaucracy and the new opportunities for social mobility, the political opposition to Claudius and Nero. Nero's cultural and provincial policy, and the manipulation of the imperial cult. All readings will be in English.

**496 Undergraduate Seminar in Classical Civilization: Origins of the Hellenistic World: Alexander the Great and His Legacy (also History 496 and Classics 602)**

Spring. 4 credits. Prerequisite: some background in ancient history or permission of instructor.

R 1:25-4:25. E. Gruen.

This course will explore the sweeping changes (political, institutional, religious, and cultural) set in motion by Alexander's invasion of the Persian empire and the fierce contests over his heritage. The seminar requires active participation in the weekly discussions, two oral reports, and one research paper.

**602 Graduate Seminar in Classical Civilization: Origins of the Hellenistic World: Alexander the Great and His Legacy (also Classics 496 and History 496)**

Spring. 4 credits. Prerequisite: permission of instructor.

R 1:25-4:25. E. Gruen.

For description, see Classics 496.

**610 Language of Myth (also Anthropology 610 and Comparative Literature 615)**

Spring. 4 credits.

T 1:25-4:25. P. Pucci, J. Siegel.

An analysis of the theories on language leading to Levi-Strauss and Derrida. Myths and the notion of "the father."

**[688 Medieval Education and the Classical Tradition**

Fall. 4 credits. Not offered 1990-91.

Hours to be arranged. W. Wetherbee.

An introduction to the institutions by which literary culture was shaped and transmitted in the medieval period. Starting from a review of the legacy of the schools of late antiquity, we will look at the evolving curricula of the medieval schools; ways in which classical and religious texts were read and glossed; the development of new literary forms in the schools; and the role of the classical traditions in shaping social ideology and defining a program for vernacular literature. Some knowledge of Latin will be very useful.)

**[681 Patristic Seminar: Graduate**

Fall or spring. 4 credits. Not offered 1990-91.]

**711-712 Independent Study for Graduate Students in Classical Civilization**

711, fall; 712, spring. Up to 4 credits.  
Hours to be arranged. Staff.

**Greek****101 Greek for Beginners**

Fall. 4 credits.

MTWTF 9:05. D. Shanzer.

Introduction to Attic Greek. Designed to enable the student to read the ancient authors as soon as possible.

**103 Attic Greek**

Spring. 4 credits. Prerequisite: 101 or equivalent.

MTWTF 12:20. H. Pelliccia.

A continuation of Classics 101.

**104 Intensive Greek**

Summer. 6 credits.

An intensive introduction to the fundamentals of ancient Greek grammar. Prepares students in one term for 200-level Greek.

**111-112 Modern Greek**

111, fall; 112, spring. 3 credits each term. Fall: MWF 12:20.

H. Kolias.

**201 Attic Authors**

Fall. 3 credits. Prerequisite: Classics 103 or 104 or equivalent.

MWF 1:25. K. Clinton.

Selected readings from Greek prose writers.

**202 The New Testament (also Near Eastern Studies 220)**

Spring. 3 credits. Prerequisite: at least one year of ancient Greek (Classics 101-103) or permission of instructor.

MWF 9:05. J. Rusten.

Selections in Greek from all four gospels and the letters of Paul, with special attention to Luke, Acts, and Corinthians I-II.

**206 Herodotus**

Spring. 3 credits. Prerequisite: Classics 103 or 104 or equivalent.

MWF 11:15. H. Pelliccia.

Selected readings from Herodotus' *Histories*.

**[209 Greek Composition**

Fall. 3 credits. Prerequisite: Classics 203 or 204 or equivalent. Not offered 1990-91.]

**[210 Greek Composition**

Spring. 3 credits. Prerequisite: Classics 209 or equivalent. Not offered 1990-91.]

**213 Intermediate Modern Greek**

Fall. 3 credits. Prerequisite: Classics 112 or placement by departmental examination.

MWF 2:30. H. Kolias.

This course, designed for students who have completed introductory modern Greek or have a reading knowledge of the language, will review modern Greek grammar and give attention to developing facility in conversational and written expression, usually in connection with assigned readings in modern Greek prose and poetry. Audio- and videocassettes will be used from time to time to introduce contemporary Greek life and culture.

**214 Readings in Modern Greek Literature**

Spring. 3 credits. Prerequisite: Classics 213 or permission of instructor.

MWF 2:30. H. Kolias.

**[301 Greek Historians**

Fall. 4 credits. Prerequisite: Classics 203 or 204 or equivalent. Not offered 1990-91.]

**[302 Greek Tragedy**

Fall. 4 credits. Prerequisite: Classics 203 or equivalent. Not offered 1990-91.]

**[303 Readings in Greek Rhetoric**

Fall. 4 credits. Not offered 1990-91.]

**[305 Attic Comedy**

Fall. 4 credits. Prerequisite: Classics 203 or 204 or equivalent. Not offered 1990-91.]

**[306 Greek Lyric Poetry**

Fall. 4 credits. Prerequisite: Classics 203 or 204 or equivalent. Not offered 1990-91.

A survey of selected "lyric" poems from Archaic to Hellenistic times.]

**[307 Plato**

Fall. 4 credits. Prerequisite: Classics 203 or 204 or equivalent. Not offered 1990-91.]

**[308 New Testament Greek**

Fall. 4 credits. Prerequisite: at least three terms of college-level Greek or permission of instructor. Not offered 1990-91.

Selected readings from the Gospels and other New Testament writings will aim at giving students the ability to translate Koine Greek with relative ease.]

**310 Greek Undergraduate Seminar: Sophocles' Oedipus**

Spring. 4 credits. Prerequisite: two 200-level courses in Greek or permission of instructor.

TR 10:10-11:25. F. Ahl.

**[311 Greek Philosophical Texts (also Philosophy 411)**

Fall or spring. Up to 4 credits. Prerequisites: knowledge of Greek and permission of instructor. Not offered 1990-91.

Hours to be arranged. T. H. Irwin.

Reading of Greek philosophical texts in the original.]

**313 Greek Epic**

Fall. 4 credits. Prerequisite: Classics 206 or equivalent.

MWF 12:20. K. Clinton.

Reading in Homer's *Iliad*. Homer's literary technique will be emphasized, and there will be discussion of the archaeological background of Homeric epic.

**401-402 Independent Study in Greek, Undergraduate Level**

401, fall; 402, spring. Up to 4 credits.

Hours to be arranged. Staff.

**417 Advanced Readings in Greek Literature: Aeschylus**

Fall. 4 credits. For advanced undergraduates and graduate students. Prerequisite: two terms of 300-level Greek or permission of instructor.

TR 11:40-12:55. H. Pelliccia.

**418 Advanced Readings in Greek: Homer**

Spring. 4 credits. For advanced undergraduates and graduate students. Prerequisite: two terms of 300-level Greek or permission of instructor.

TR 8:40-9:55. P. Pucci.

**419 Advanced Greek Composition**

Fall. 3 credits. Prerequisite: Classics 209-210 or equivalent.

TR 10:10-11:25. J. Rusten.

**[442 Greek Philosophy**

Fall or spring. 4 credits. Not offered 1990-91.]

**[605-606 Graduate Survey of Greek Literature**

605, fall; 606, spring. 4 credits each term. Prerequisite: linguistic proficiency to be determined by instructor. Not offered 1990-91; next offered 1991-92.  
M W F 11:15.

A survey of Greek literature in two semesters. Classics 605: Greek literature from Homer to the mid-fifth century. Classics 606: Greek literature from the late fifth century to the Empire.]

**671 Graduate Seminar in Greek: Ritual and Tragedy**

Fall. 4 credits.  
W 1:25-4:25. P. Pucci.

**672 Graduate Seminar in Greek: Plato**

Spring. 4 credits.  
W 1:25-4:25. P. Mitsis.

**701-702 Independent Study for Graduate Students in Greek**

701, fall; 702, spring. Up to 4 credits.  
Hours to be arranged. Staff.

**Latin****105 Latin for Beginners**

Fall. 4 credits.  
M T W F 9:05, L. B. Sellers; M T W F 11:15, R. Morello; M T W F 12:20, I. Hohendahl; M T W F 1:25, J. DeFilippo.

An introductory course in the essentials of Latin, designed for rapid progress toward reading the principal Latin writers.

**106 Elementary Latin**

Spring. 4 credits.  
M T W F 10:10, M. Kwentner; M T W F 11:15, P. Wilson; M T W F 12:20, K. Clinton.  
A continuation of Classics 105, using readings from various authors.

**107 Intensive Latin**

Spring or summer. 6 credits.  
Spring: M W F 9:05 and T R 8:40-9:55.  
I. Hohendahl.

Prepares students in one term for 200-level Latin.

**205 Intermediate Latin**

Fall or summer. Prerequisite: Classics 106, 107, or 108 or placement by departmental examination.

Fall: M W F 11:15, J. DeFilippo; M W F 1:25, H. Pelliccia.

Readings in Latin prose.

**[207 Catullus**

Spring. 3 credits. Prerequisite: Classics 106, 107, or 108 or one term of 200-level Latin. Not offered 1990-91.  
M W F 11:15.]

**208 Roman Drama**

Spring. 3 credits. Prerequisite: Classics 106, 107, or 108 or one term of 200-level Latin.  
M W F 9:05. D. Shanzer.

**216 Vergil**

Spring. 3 credits. Prerequisite: Classics 106, 107, or 108 or one term of 200-level Latin.  
M W F 1:25. J. Ginsburg.

**241 Latin Composition**

Fall. 3 credits. Prerequisite: Classics 106, 107, or 108 or equivalent.  
M W F 2:30. J. Ginsburg.

**[242 Latin Composition**

Spring. 3 credits. Prerequisite: Classics 241 or equivalent. Not offered 1990-91.]

**312 Latin Undergraduate Seminar: The Fall of the Roman Republic (also Classics 411)**

Fall. 4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor.  
M W F 10:10. F. Ahl.

Selections from Cicero (letters and speeches), Caesar's *Civil Wars*, and Suetonius's *Life of Caesar* illustrating the characters and issues of the Roman Civil Wars between 49 and 44 B.C.

**[314 The Augustan Age**

Fall. 4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor. Not offered 1990-91.

**[315 Roman Satire**

Spring. 4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor. Not offered 1990-91.]

**[316 Roman Philosophical Writers**

Spring. 4 credits. Prerequisite: two terms of 200-level Latin. Not offered 1990-91.]

**[317 Roman Historiography**

Fall. 4 credits. Prerequisite: one term of 300-level Latin or permission of instructor. Not offered 1990-91.

J. Ginsburg.

Reading of three "conspiracy narratives" from the works of Sallust, Livy, and Tacitus. Class discussion will focus both on historical questions (such as the causes of discontent that gave rise to these episodes in Roman history and why the Romans defined these events as conspiracies) and on the narrative techniques used by Roman historians to impose an interpretation on their material.]

**318 Roman Elegy: Tibullus, Propertius, Ovid**

Spring. 4 credits. Prerequisite: two terms of 200-level Latin.  
M W F 9:05. G. Davis.

**[366 Late Latin: Epic after Vergil**

Fall. 4 credits. Not offered 1990-91.

T R 10:10-11:25. F. Ahl.

Selections from Ovid, Lucan, Statius, Silius, and Prudentius to illustrate the development and refinement of Latin epic during the Roman Empire.]

**[368 Medieval Latin Literature**

Fall. 4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor. Not offered 1990-91.]

**411 Advanced Readings in Latin Literature (also Classics 312)**

Fall. 4 credits. Prerequisite: two terms of 300-level Latin or permission of instructor.

M W F 10:10. F. Ahl.

For description, see Classics 312.

**412 Advanced Readings in Latin Literature**

Spring. 4 credits. For advanced undergraduates and graduate students. Prerequisite: two terms of 300-level Latin or permission of instructor.

T R 11:40-12:55. D. Shanzer.

**[441 Advanced Latin Composition**

Spring. 3 credits. For undergraduates who have completed Latin 241-242 and for graduate students. Not offered 1990-91.]

**451-452 Independent Study in Latin, Undergraduate Level**

451, fall; 452, spring. Up to 4 credits.  
Hours to be arranged. Staff.

**468 Augustine's Confessions**

Fall. 4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor.  
M 2:30-4:30. D. Shanzer.

This course, intended for advanced undergraduates and for graduate students, will consist of a close reading and interpretation of all 13 books of Augustine's *Confessions* in Latin. Augustine will be studied in his historical context. Attention will be devoted to his early career as student and rhetorician, and the process of his conversion from Manichaeism to philosophy, and thence to Christianity. The *Confessions* is a work of multiple literary layers: the class will concern itself with its rhetorical structure, what it owes to the Bible and Christian prayer, what it owes to various pagan literary traditions, such as soliloquy, philosophical autobiography, and epic. Since the books 12 and 13 of the *Confessions* are a commentary on Genesis, some work on the Christian exegetical tradition is anticipated as well as discussion of the famous problem of literary unity in the *Confessions*. Students with backgrounds other than in Classics are most welcome. There will be one term paper, one longer report, and various short oral presentations.

**625-626 Graduate Survey of Latin Literature**

625, fall; 626, spring. 4 credits each term. Prerequisite: linguistic proficiency to be determined by instructor.

M W F 11:15. D. Mankin.

A survey of Latin literature in two semesters. Classics 625: Roman Satire. [Classics 626: not offered 1990-91.]

**751-752 Independent Study for Graduate Students in Latin**

751, fall; 752, spring. Up to 4 credits.  
Hours to be arranged. Staff.

**Classical Art and Archaeology****[219 Mediterranean Archaeology (also Near Eastern Studies 267)**

Fall. 3 credits. Not offered 1990-91.  
M W F 12:20. J. Coleman.

An examination of the archaeological bases of ancient Mediterranean civilization with special focus on contacts and interrelationships in the Bronze Age (ca. 3500-1100 B.C.). Topics include the Neolithic of Anatolia, Greece, and the Near East; the rise of civilization in Egypt; the Bronze Age states of Syro-Palestine (Ebla, Ugarit, Byblos, etc.); Cyprus, copper, and the Alasia question; the Hittites and Bronze Age Anatolia; the early Bronze Age in Greece; Minoans, Mycenaeans, and their eastern and western contacts; the Bronze Age in the western Mediterranean; and ancient ships and trade in the late Bronze Age.]

**220 Introduction to Art History: The Art of the Classical World (also History of Art 220)**

Spring. 3 credits.  
M W F 10:10. A. Ramage.

The sculpture, vase painting, and architecture of the ancient Greeks, from the Geometric period through the Hellenistic, and the art of the Romans from the early republic to the late empire.

**221 Minoan-Mycenaean Art and Archaeology (also Archaeology 221 and History of Art 221)**

Fall. 3 credits. Students may not obtain credit for both this course and Classics 319.

M W F 10:10. P. I. Kuniholm.

The birth of civilization in Greece and the Aegean islands during the Bronze Age. The main focus is on the rise and fall of Minoan Crete and Mycenaean Greece, with consideration given to the nature and significance of Aegean interactions with Egypt, the Near East, and Anatolia.

**[233 Archaeology in Action II (also Archaeology 233)]**

Spring. 3 credits. Prerequisite: permission of instructor. Not offered 1990–91.

M 2:30; two labs to be arranged.  
P. I. Kuniholm.

Objects from the Classical, Hellenistic, and Roman periods are "dug" out of Cornell basements, identified, cleaned, restored, catalogued, and photographed and are considered in their appropriate historic, artistic, and cultural contexts.]

**[250 Etruscan Art and Archaeology (also Archaeology 250 and History of Art 223)]**

Fall. 3 credits. Not offered 1990–91.

J. Whitehead.

An examination of Etruscan culture for both its uniqueness and its diversity. The first part of the course will trace the history and the art of the Etruscans, beginning with questions of their origins and ending with their assimilation into the Roman state. Developments in artistic style run parallel to those in Greek art and illuminate the unique Etruscan character. The second half will focus on the individual cities and how strongly they differed from one another in their art, customs, practices, and relationship to Rome.]

**309 Dendrochronology of the Aegean (also Archaeology 308 and History of Art 309)**

Fall or spring. 4 credits. Limited to 10 students. Prerequisite: permission of instructor.

M 12:20; two labs to be arranged.  
P. I. Kuniholm.

Participation in a research project of dating modern and ancient tree-ring samples from the Aegean and Mediterranean. Supervised reading and laboratory work. A possibility exists for summer fieldwork in Greece or Turkey.

**[319 Minoan-Mycenaean Archaeology**

Spring. 4 credits. Prerequisite: participants are expected already to have completed some course work in Mediterranean or Classical archaeology (e.g., Classics 219/Near Eastern Studies 267, Classics/History of Art 220). Students may not obtain credit for both this course and Archaeology/Classics/History of Art 221. Not offered 1990–91.

T R 10:10–11:25. J. Coleman.

The art and archaeology of Greece and the Aegean in the Bronze Age (ca. 3500–1100 B.C.). Detailed treatment is given to the Minoan and Mycenaean civilizations of the middle and late Bronze Age. Other topics include the Neolithic "background" of Aegean civilization, the early Bronze Age in Greece, Crete, and the Cycladic islands; the volcanic eruption of Thera; and Aegean interconnections with Cyprus and the Near East and, in particular, the evidence for Mycenaean shipping, trade, and immigration from

1400–1100 B.C. Two papers will be presented in class, and these will subsequently be handed in and graded.]

**[320 Arts and Monuments of Athens (also History of Art 320)]**

Spring. 4 credits. Prerequisite: Classics 220 or permission of instructor. Not offered 1990–91.

M W F 1:25. J. Coleman.

Recent developments in the archaeology of Athens from the Geometric period to late antiquity. Topics will include consideration of the nature of Athenian society and an assessment of the influence of Athens on the rest of the Greek world and beyond.]

**[321 Archaeology of Cyprus (also History of Art 321)]**

Spring. 4 credits. Prerequisite: Classics 220 or permission of instructor. Not offered 1990–91.

Study of Cyprus from its first settlement in the Neolithic period until the end of the ancient world. Special emphasis on the Bronze Age, the acme of Cypriot culture, and the neighboring civilizations. Lectures and oral reports by students.]

**[322 Greeks and Their Neighbors (also History of Art 328)]**

Fall. 4 credits. Prerequisite: Classics 220 or 221, or permission of instructor. Not offered 1990–91.

T R 1:25–2:40. J. Coleman.

A study of the archaeological and other evidence for the interaction between Greek civilization and the eastern and western Mediterranean from the thirteenth to the fourth centuries B.C.E. The course will focus on Greek relationships with Phoenicia and the rest of the Levant, Cyprus, Anatolia, and the Etruscans in the post-Bronze Age period.]

**[323 Painting in the Greek and Roman World (also History of Art 323)]**

Spring. 4 credits. Not offered 1990–91.

M W F 2:30. A. Ramage.

Vase painting, wall painting, and mosaics from the ancient Mediterranean world will be studied in conjunction with the testimony of Greek and Roman sources. An attempt will be made to grasp the concerns and achievements of the Classical painters.]

**[325 Greek Vase Painting (also History of Art 325)]**

Spring. 4 credits. Prerequisite: previous enrollment in a History of Art or Classics course or permission of instructor. Not offered 1990–91.

M W F 10:10. A. Ramage.

A stylistic and iconographical approach to an art in which the Greeks excelled. The course will be arranged chronologically, from the early (eleventh century B.C.), anonymous beginnings to the "personal" hands of identifiable masters of the fifth and fourth centuries B.C. Styles other than Attic will be stressed.]

**[326 Art and Archaeology of Archaic Greece (also History of Art 326)]**

Fall. 4 credits. Not offered 1990–91.

A study of the formative period of Classical Greek civilization, based primarily on the evidence of art and archaeology. Attention is concentrated on the beginnings and early developments of architecture, sculpture, and painting.]

**[327 Greek and Roman Coins (also History of Art 327)]**

Fall. 4 credits. Prerequisite: History of Art 220 or Classics 220 or permission of instructor. Not offered 1990–91.

M W F 11:15. A. Ramage.

The varied issues of Greek cities and the Roman state are examined. Coins are considered as art objects as well as economic and historical documents. The changes in design, value, and metals from the origins of coinage to the late Roman period are studied. Lectures, student presentations, and work with actual examples.]

**[328 Greek Architecture (also History of Art 324)]**

Fall. 4 credits. Prerequisite: Classics 220 or permission of instructor. Not offered 1990–91.]

**[329 Greek Sculpture (also History of Art 329)]**

Spring. 4 credits. Not offered 1990–91.

This course will examine ancient Greek sculpture, both three-dimensional and two-dimensional, from the Archaic period to the Hellenistic. We will study various aspects of the works: technological advances in handling materials, the changing ideology of the sculptors, regionality of styles, and taste of individual patrons. Sculptures of marble and bronze will be considered, and comparisons with other ancient civilizations that influenced the Greek will be undertaken.]

**[330 Art in Pompeii: Origins and Echoes (also History of Art 330)]**

Spring. 4 credits. Not offered 1990–91.]

**350 Arts of the Roman Empire (also History of Art 322)**

Fall. 4 credits. Prerequisite: Classics 220 or permission of instructor.

T R 10:10–11:25. J. Whitehead.

The visual arts in the service of the first world state. The course starts with the Etruscan and Republican period but concentrates on monuments of the Imperial era in Italy and the provinces until the time of Constantine.

**[356 Practical Archaeology (also Archaeology 356)]**

Spring. 4 credits. Prerequisite: one course in archaeology. Not offered 1990–91.

M W F 11:15, plus workroom sessions to be arranged. J. Coleman.

The fundamentals of archaeological fieldwork, including techniques of excavation and recording. Hands-on experience with cataloging of ancient objects in the Herbert F. Johnson Museum of Art and the collection of the Department of Classics. No previous fieldwork required. Especially recommended for those planning to participate in summer field programs such as the Cornell project at Halai and East Lokris in Greece.]

**360 Field Archaeology in Greece (also Archaeology 360)**

Summer. 6 credits.

J. Coleman.

A six-week archaeological field training program in conjunction with the Cornell Halai and East Lokris Project. For information and application forms, contact Professor John E. Coleman, Department of Classics, 120 Goldwin Smith Hall.



**361 Summer Program in Etruscan Archaeology at La Piana near Siena, Italy (also Archaeology 361)**

Summer. Non-credit or 3 credits.

J. Whitehead.

A five-week program that offers a field school in excavation techniques, handling of artifacts, and archaeological recording. For information and application forms, contact Professor Jane Whitehead, Department of Classics, 120 Goldwin Smith Hall.

**[423 Ceramics (also Archaeology 423 and History of Art 423)]**

Fall. 4 credits. Prerequisite: Classics 220 or History of Art 220 or permission of instructor. Not offered 1990-91.

T 2:30-4:30. A. Ramage.

Greek and Roman pottery specimens from several Near Eastern and Mediterranean sites will be studied to provide direct experience in one of the basic prerequisites of archaeological excavation—the identification and dating of pottery types. A report, delivered in class, will concern ancient ceramic materials or particular types and periods. Practical experience in making and decorating pottery will be encouraged.]

**[431 Greek Sculpture (also History of Art 431)]**

Fall. 4 credits. Not offered 1990-91.]

**[432 Sardis and the Cities of Asia Minor (also Archaeology 432 and History of Art 432)]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

T 2:30-4:30. A. Ramage.

The growth and interaction of the Greek and Roman cities and their art will be studied using the finds and conclusions from the Cornell-Harvard excavations at Sardis as a focal point. The magnificent works of art and architecture will be set beside domestic remains and objects of daily life. We shall examine local themes in the context of the history, the topography, and the larger political and economic scene in Asia Minor. We shall concentrate on the Golden age of Lydia and Ionian Greece.]

**[434 The Rise of Classical Greece (also Archaeology 434 and History of Art 434)]**

Spring. 4 credits. Prerequisite: Classics 220 or 221, History of Art 220 or 221, or permission of instructor. Not offered 1990-91.

T R 2:55-4:25. P. I. Kuniholm.

The art and archaeology of the Greek dark ages. Topics include site reports, pottery, metalworking, the introduction of the alphabet, the beginnings of coinage, and links with Anatolia and the Near East.]

**[435 Seminar on Roman Art: Social Stratification in Roman Art (also History of Art 427)]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

M 2:30-4:30. J. Whitehead.

The course begins with a chronological overview of Roman art and with concepts of *romanitas*: underlying all this diversity is there an essence that can be considered purely Roman? The rest of the course will explore the dichotomies, the contrasting ideals and ideologies as expressed in the art of the different segments of society: artisan and aristocrat, freedmen and emperor, provincial and urbanite, foreign and domestic, rich and nouveau riche. It seeks to define the degree to which artistic taste is bound to social class.]

**475-476 Independent Study in Classical Archaeology, Undergraduate Level**

475, fall; 476, spring. Up to 4 credits.

Hours to be arranged. Staff.

**[629 Graduate Seminar in Bronze Age Archaeology]**

Fall. 4 credits. Not offered 1990-91.

T 1:25-4:25. J. Coleman.

Cyprus and its interconnections with the Aegean and the Near East in the middle and late Bronze Ages. Special focus on the problems of trade between Cyprus and the Aegean in the late Bronze Age.]

**[630 Graduate Seminar in Classical Greek Archaeology]**

Fall. 4 credits. Not offered 1990-91.

M 1:25-4:25. J. Coleman.

The rise of Greek civilization in the seventh and sixth centuries B. C. is exemplified in art, architecture, and daily life. Focus on the evidence for the formation of the Greek polis, such as religious and military architecture, density of settlement, and interrelations between towns, cities, and regions.]

**721-722 Independent Study for Graduate Students in Classical Archaeology**

721, fall; 722, spring. Up to 4 credits.

Hours to be arranged. Staff.

**Greek and Latin Linguistics**

**[421 Greek Comparative Grammar (also Linguistics 609)]**

Fall. 4 credits. Prerequisite: thorough familiarity with the morphology of classical Greek. Not offered 1990-91.

A. Nussbaum.

The prehistory and evolution of the sounds and forms of ancient Greek as reconstructed by comparison with the other Indo-European languages.]

**[422 Latin Comparative Grammar (also Linguistics 610)]**

Fall or spring. 4 credits. Prerequisite: thorough familiarity with the morphology of classical Latin. Not offered 1990-91.

A. Nussbaum.

The prehistory and evolution of the sounds and forms of Classical Latin as reconstructed by comparison with the other Indo-European languages.]

**[424 Italic Dialects (also Linguistics 612)]**

Fall. 4 credits. Not offered 1990-91.

T R 11:40-12:55. A. Nussbaum.

The phonology and morphology of Faliscan, Oscan, and Umbrian studied through the reading of epigraphical texts. Attention to the relationships of these languages to Latin and the question of Proto-Italic.]

**[425 Greek Dialects (also Linguistics 611)]**

Fall. 4 credits. Not offered 1990-91.

M W F 9:05. A. Nussbaum.

A survey of the dialects of ancient Greek through the reading and analysis of representative epigraphical and literary texts.]

**[426 Archaic Latin (also Linguistics 614)]**

Spring. 4 credits. Prerequisite: reading knowledge of Latin. Not offered 1990-91.

Hours to be arranged. A. Nussbaum.

Reading of epigraphic and literary preclassical texts with special attention to archaic and dialectal features. The position of Latin among the Indo-European languages of ancient Italy, the rudiments of Latin historical grammar, and aspects of the development of the literary language.]

**[427 Homeric Philology (also Linguistics 613)]**

Spring. 4 credits. Prerequisite: ability to read Homeric Greek. Not offered 1990-91.

Hours to be arranged. A. Nussbaum.

The language of the Homeric epics: dialect background, archaisms, epicisms, modernizations. The notion of a *Kunstsprache*: its constitution, use, and internal consistency. The phonological and morphological aspects of epic compositional technique.]

**[429 Mycenaean Greek (also Linguistics 615)]**

Fall or spring. 4 credits. Prerequisite: thorough familiarity with the morphology of Classical Greek. Not offered 1990-91.

A. Nussbaum.

An introduction to the epigraphy, language, and content of the Linear B tablets with special attention to their implications for Greek historical grammar and dialectology.]

**Sanskrit**

**[131-132 Elementary Sanskrit (also Sanskrit 131-132)]**

131, fall; 132, spring. 3 credits each term. Not offered 1990-91; next offered 1991-92.

M W F 2:30. C. Minkowski.

**251-252 Intermediate Sanskrit (also Sanskrit 251-252)]**

251, fall; 252, spring. 3 credits each term.

Prerequisite: Classics 132 or equivalent.

Hours to be arranged. C. Minkowski.

Readings from the literature of Classical Sanskrit. Fall: selections from the two Sanskrit epics, the *Mahabharata* and the *Ramayana*. Spring: more selections from the epics, and from either Sanskrit story literature or from Sanskrit dramas.

Also see Classics 390 and Classics 391 (Classical Civilization listings).

**Honors Courses**

**370 Honors Course**

Spring. 4 credits. To be taken in the junior year.

A program of reading and conferences centered on an author or topic chosen in accordance with the special interests of the student and instructor.

**471 Honors Course**

Fall. 4 credits. To be taken in the senior year. A continuation of Classics 370, with change of author or topic.

**472 Honors Course: Senior Essay**

Spring. 4 credits. For students who have successfully completed Classics 471. Topics must be approved by the student's honors committee at the end of the first term of the senior year.

## Related Courses in Other Departments

See listings under:

Archaeology  
Comparative Literature  
English  
History  
History of Art  
Medieval Studies  
Modern Languages and Linguistics  
Near Eastern Studies  
Philosophy  
Society for the Humanities  
Women's Studies

## COMPARATIVE LITERATURE

G. Davis, chair (139 Goldwin Smith Hall, 255-4155); W. Cohen, graduate faculty representative (343 Goldwin Smith Hall, 255-6279); W. Kennedy, director of undergraduate studies (163 Goldwin Smith Hall, 255-6795); C. Arroyo, A. Caputi, C. Carmichael, D. Castillo, J. Culler, G. Davis, G. Gibian, D. Grossvogel, P. Hohendahl, W. Holdheim (Emeritus), J. Monroe, E. Rosenberg, L. Waugh

Also cooperating: D. Bathrick, P. Carden, M. Hays, C. Kaske, D. Mankin, J. Ngate, L. Olschner, J. Piedra, J. Rusten, G. Waite

The Department of Comparative Literature provides a broad range of courses in European as well as non-European literatures. Courses variously stress significant authors, themes, problems, styles, genres, historical periods, and theoretical perspectives. The departmental offerings reflect current interdisciplinary approaches to literary study, hermeneutics, rhetorical analysis, semiotics, deconstruction, Marxism, reception aesthetics, feminism, formalism, and psychoanalysis.

### The Major

The major enables students to develop an integrated knowledge of Western literature, to strengthen their reading and writing abilities, and to prepare for careers demanding analytical, interpretive, and evaluative skills. Prospective majors should consult with the director of undergraduate studies. After declaring a major, a student chooses an adviser from the department's faculty. The requirements for the major are designed to allow each student to follow a course of study that combines intellectual rigor with the pursuit of personal interests. The specific contours of such a program are worked out in consultation with the student's adviser.

### Requirements for the Major

1) Five courses in Comparative Literature at the 200 level and above, including the core course listed below. A student may include up to two literature courses from other departments.

2) One core course in Comparative Literature (for 1990-91 the core courses are Comparative Literature 494 [fall] and Comparative Literature 401 [spring]), to be taken by all majors either in the spring term of their junior year or the fall term of their senior year. Students may enroll in both core courses.

3) Five courses in literature or other areas of the humanities at the 200 or higher level, to be taken in one or more foreign literature departments. Texts must be read in the original language. A student may offer one language course (conversation, composition, etc.).

4) A senior essay (Comparative Literature 493) of roughly fifty pages, to be written during the senior year under the direction of the student's adviser.

The department also encourages:

- 1) a program that includes broad historical coverage (e.g., Comparative Literature 201-202: Great Books, Comparative Literature 210: Ancients and Moderns); intensive study of a single genre, (e.g., Comparative Literature 320: Introduction to Caribbean Poetry, Comparative Literature 353: European Drama, 1600-1900, Comparative Literature 363-364: The European Novel); analysis of problems in literary theory (e.g., Comparative Literature 302: Literature and Theory, Comparative Literature 381: Marxist Cultural Theory, and Comparative Literature 402: Theories of Rhetoric)
- 2) a second foreign language, especially for students interested in graduate work in literature.

### Honors

A student who completes the requirements for the major is eligible for the degree of Bachelor of Arts with honors in comparative literature. The department bases its decision on the student's achieving grades of at least B+ in the senior essay and in course work for the major, and on overall academic performance at Cornell.

### Freshman Writing Seminars

Most 100-level courses may be used toward satisfying the freshman writing seminar requirements. A full description of the freshman writing seminar program may be found on p. 22.

### Courses

#### 150 Introduction to Cultural Studies (also Society for the Humanities 150)

Fall. 4 credits. Does not satisfy the freshman writing seminar requirement, but will satisfy the distribution requirement.

T R 10:10-11:25. W. Cohen.

An introduction not to culture but to the study of it. This course outlines an emergent field of inquiry concerned with the ultimately political character of meanings, values, subjectivity, and symbolization. Topics include cultural theory, mass culture/popular culture, cultures of resistance, and cultural imperialism. Examples are drawn primarily from the 1960s and their legacy. Emphasis is on responses to the Vietnam War: news coverage, documentaries, scholarship, memoirs and letters, architecture, fiction, poetry, theatre, comics, tv series, and especially popular music (Beatles, Dylan, Arlo Guthrie, Country Joe, etc.) and Hollywood films (e.g., *Apocalypse Now*, *Coming Home*, *Deer Hunter*, *Full Metal Jacket*, *Platoon*, *Born on the Fourth of July*—if available—and perhaps one Rambo movie).

#### 201-202 Great Books

201, fall; 202, spring; summer, TBA. 4 credits. Comparative Literature 201 and 202 may be taken independently of each other.

Fall: M W F 11:15-12:05. W. J. Kennedy.

Spring: M W F 11:15-12:05. J. Monroe.

A reading each semester of seminal texts that represent and have shaped Western culture and hence form an essential part of the student's intellectual equipment. By analyzing, interpreting, and evaluating, students will develop critical reading abilities. 201: selections from the Bible, Homer, Dante, Rabelais, Shakespeare, and others. 202: selections from Moliere, Goethe, Blake, Flaubert, Baudelaire, Kafka, Woolf, Conrad, Eliot, Garcia-Marquez and others.

#### [210 Ancients and Moderns

Spring. 4 credits. Not offered 1990-91.

M W F 12:20. W. J. Kennedy.

Key texts from the Bible, Greek civilization, and Roman antiquity have had an astonishing impact on Western culture in modern times. This course compares and contrasts a selection of important themes from those texts. They will be drawn from the Bible and Nietzsche, Aeschylus and Dostoevsky, and Homer and Joyce.]

#### 223 The Comic Theater (also Classics 223)

Spring. 3 credits. Students may not obtain credit for both this course and Classics 123.

M W F. 12:20-1:10. J. Rusten.

The origins of comic drama in ancient Greece and Rome and its subsequent incarnations especially in the Italian renaissance (*commedia erudita* and *commedia dell'arte*), Elizabethan England, seventeenth-century France, the English Restoration, and Hollywood in the thirties and forties. Chief topics will be the growth of the comic theatrical tradition and conventions; techniques and themes of comic plots (trickster, parody, farce, caricature); and the role of comedy in society. All readings in English.

#### 235 Modern Greek Poetry and Politics (also Classics 235, 3 credits, and Government 335, 4 credits)

Fall. 3 credits.

T R 1:25-2:40. G. Holst-Warhaft.

The history of modern Greece has been marked by a series of political crises that have resulted in deep divisions in society. Greek poetry has reflected these crises and divisions; the poetry of nineteenth- and twentieth-century Greece will thus be interpreted in its historical and political context. It will concentrate on four periods in which the interaction has been particularly strong. The continuity of ancient Greek myths in modern Greek poetry will also be explored. Students taking this course as Government 335 for 4 credits must write an additional paper on a political topic.

#### 236 Greek Mythology (also Classics 236)

Fall. 3 credits.

T R 11:40-12:55. D. Mankin.

A survey of the Greek myths, with emphasis on the reconstruction of the content and significance of the myths in preliterate Mediterranean society, including the place of myth in Greek life and consciousness; the factors and influences involved in the creation of myths; and the use of myths for our understanding of Greek literature, religion, and moral and political concepts.

**302 Literature and Theory (also English 302/702)**

Fall. 4 credits.

M W 10:10; F sections, to be arranged.

J. Culler.

A study of issues in contemporary theoretical debates, with attention to structuralism, deconstruction, historicism, psychoanalysis, and feminism. Readings by R. Barthes, J. Derrida, M. Foucault, B. Johnson, J. Rose, and others. No previous knowledge of literary theory is assumed.

**[320 Introduction to Caribbean Poetry**

Spring. 4 credits. Not offered 1990-91.

M W F 10:10-11. G. Davis.

The primary aim of this course is to introduce major authors and themes in Caribbean poetry against the background of the historical and cultural interactions between Europeans and people of African descent in the New World. Select masterworks of four contemporary poets will be the main focus of our detailed readings: Derek Walcott, Edward Brathwaite, Aime Cesaire, and Nicholas Guillen. Topics to be explored in conjunction with the literary texts will include the relation of "creole" to metropolitan languages, the problem of cultural identity, colonizer/colonized relations, the amalgamation of European and African cultural traditions, and the quest for an "authentic" Caribbean voice. Wherever relevant to the understanding of the literary texts, examples of oral, popular culture (e.g., calypso and reggae lyrics) will receive appropriate consideration. In addition to the poetry, the class will study a small selection of West Indian novels and films that provide a concrete sense of place and social context (e.g., Jamaica Kincaid's *Annie John*; Jean Rhys' *Wide Sargasso Sea*; Eugene Palcy's film *Sugar-Cane Alley*).

**324 Selected Problems of Law and Religion**

Fall. 4 credits. Limited to 20 juniors and seniors. A Common Learning course.

T R 8:40-9:55. C. M. Carmichael.

The experience of past generations in wrestling with issues of perennial concern and how their efforts might enhance our contemporary understanding of them. Perspectives from biblical, Jewish, Greek, and Roman antiquity and from American legal and religious history will be brought to bear on such topics as abortion, bribery, civil disobedience, contraception, death, divorce, drunkenness, individual and communal responsibility, informal marriage, limitations on self-sacrifice, rebirth, resisting or appeasing an oppressor, suicide, and unwanted salvation.

**326 Christianity and Judaism**

Spring. 4 credits. Not open to freshmen.

T R 10:10-11:25. C. M. Carmichael.

A study of the New Testament as a product of first-century Palestinian and Hellenistic Judaism. Other text (also in translation): *Passover Haggadah*.

**328 Literature of the Old Testament**

Fall. 4 credits. Not open to freshmen.

T R 11:40-12:55. C. M. Carmichael.

Analysis of selected material in translation.

**354 Modern Drama (also Theatre Arts 327)**

Spring. 4 credits.

M W 11:15-12:05. M. Hays.

Readings in European drama from Ibsen to the present.

**362 The Culture of the Later Renaissance (also History 364)**

Spring. 4 credits.

T R 10:10-11; disc. R and F to be arranged.

W. Kennedy, C. Kaske.

Members of various departments will lecture on Luther, Michelangelo, Montaigne, Edmund Spenser, Monteverdi, Cervantes, Copernicus, and Galileo. Guest lecturers will include R. Harris-Warrick, music; Peter Dear, history; and C. Arroyo, romance studies. Lectures and discussion will undertake close reading of texts, literary and visual, and will introduce different methods of interpretation and of historical analysis. Written requirements: two short papers and a final examination.

**363-364 The European Novel**

363, fall; 364, spring. 4 credits. Comparative Literature 363 and 364 may be taken independently of each other.

Fall: T R 10:10-11:25. G. Gibian. Spring:

T R 11:40-12:55. E. Rosenberg.

Close reading of some fifteen texts which essentially chart the course of the European novel. (The syllabus will follow generally but not strictly chronological lines, though the texts each term will be read in chronological order.) 363: Cervantes to Joyce. 364: Tolstoy to Mann. The novelists to be studied include Voltaire, Goethe, Stendhal, Balzac, Dickens, Flaubert, Dostoevsky, George Eliot, Hardy, Gide, and Kafka; readings include *Don Quixote*, *The Red and the Black*, *Madame Bovary*, *Crime and Punishment*, *Great Expectations*, *Middlemarch*, *The Mayor of Casterbridge*, *Portrait of the Artist as a Young Man*, *Death in Venice*, and *The Counterfeiters*. Analysis of novelistic subgenres: picaresque fiction, moral fable, fantasy, philosophical novel, *récit*, detective story, *Bildungsroman*. All texts to be read in English; students who command the pertinent foreign languages may, of course, read the books in the original. Two or three papers, no final exam.

**[372 Selections from Contemporary World Literature**

Spring. 4 credits. Limited to 15 students. Core course for majors. Not offered 1990-91.

T R 11:40-12:55. J. Monroe.

Readings of celebrated texts by contemporary authors with attention to the local and global contexts of their literary production and reception. The course will include works in various genres by such authors as Christa Wolf, Marguerite Duras, Gunter Grass, Gabriel Garcia Marquez, Salman Rushdie, Raul Zurita, Milan Kundera, Wole Soyinka, and Toni Morrison.]

**394 Transatlantic Renaissance (also Spanish Literature 394)**

Spring. 4 credits.

M W F 2:30-3:20. J. Piedra.

For description, see Spanish Literature 394.

**403 History of Literary Theory (also Comparative Literature 603)**

Spring. 4 credits. Core course for majors.

M 2:30-4:25. W. J. Kennedy.

A survey of European literary theory since Aristotle. Emphasis on major texts and on the main contours of the history of literary theory. Some consideration of literary criticism as ideology, in relation to literature, philosophy, and social history. Readings from Longinus, Nietzsche, the Russian formalists, Barthes, and others.

**404 History into Fiction: Nazis and the Literary Imagination (also English 404 and NES 404)**

Fall. 4 credits.

T R 11:40-12:55. E. Rosenberg.

The twelve years of Hitler's rule remain the most critical, "longest" years of the century. We shall read some seven or eight texts by Anglophone and Continental novelists (and a few playwrights) that explore salient features of the regime: Hitler's rise to power (e.g., Mann's "Mario and the Magician," Hughes's *Fox in the Attic*); civilian life in Nazi Germany (e.g., Isherwood's *Berlin Stories*, Brecht's *Private Life of the Master Race*, Grass's *Dog Years*); World War II (Boll's fiction); the Occupation (Sartre's *Flies* or Camus's *Plague*, Nabokov's "Aleppo"); the American brand (Lewis's *It Can't Happen Here*, Faulkner's "Percy Grimm"); the persecution of the European Jews (Sartre's "Childhood of a Leader," selections from Julian Barnes's novel *History of the World*, Jakob Lind's *Soul of Wood*). Historical commentary; uses of documentary materials. Brief ancillary selections by Adorno, Arendt, Sartre. Two short papers; no exam.

**410 Semiotics and Language (also French Romance 400 and Linguistics 400)**

Spring. 4 credits. Prerequisite: some background in an area relevant to semiotics: e.g., linguistics, philosophy, psychology, anthropology, or literature; or permission of instructor.

Hours to be announced. L. Waugh.

An introduction to the study of semiotics in general and to particular semiotic theories (e.g., those of Saussure, Peirce, Jakobson) and to language as a semiotic system. The particular topics to be discussed will depend on the interest of the students.

**416 Literary Translation in the West (also German Studies 416 and Romance Studies 416)**

Spring. 4 credits. Prerequisite: good reading knowledge of German or French; any other language(s) desirable.

T R 1:25-2:40. L. M. Olschner.

For description, see German Studies 416.

**417 Fascism and Mass Culture (also German Studies 417, Society for the Humanities 417, and Theatre Arts 417)**

Fall. 4 credits. Taught in English for advanced undergraduate and graduate students.

W 3:35-5:30. D. Bathrick.

For description, see German Studies 417.

**419-420 Independent Study**

419, fall; 420, spring. Variable credit. Comparative Literature 419 and 420 may be taken independently of each other.

Hours to be arranged. Staff.

**[421 Old Testament Seminar**

Fall. 4 credits. Not offered 1990-91.

C. M. Carmichael.

Identification and discussion of problems in selected material from the Pentateuch.]

**426 New Testament Seminar**

Spring. 4 credits. Limited to 20 students.

T 2:30-4:25. C. M. Carmichael.

Identification and discussion of problems in the New Testament.

**[429 Readings in the New Testament (Near Eastern Studies 429)]**

Spring. 4 credits. Limited to 25 students. Not offered 1990-91.

M W F 1:25. J. P. Bishop.

Close readings of representative texts from the New Testament in modern scholarly editions, with the help of appropriate commentary, introductory and specialized. The focus for 1990 will be on Acts and Paul. All readings will be in English, but repeated reference to the Greek original will be made. Graduate students and undergraduates from other colleges who are interested in the material should not feel inhibited from enrolling. The approach will be primarily exegetical; that is, we will try to find out what the texts say and what they mean by what they say. Thus we can hope to stay open to scholarly and religious issues alike.]

**439 Oral and Written Traditions in Africa (also French Literature 439 and Society for the Humanities 439)**

Fall. 4 credits.

M 2:30-4:25. J. Ngate.

Organized around but not limited to two major African epics, *Soundjata* and *Chaka*, this course will enable us to investigate the nature, the validity, and the implications of many Francophone African writers' claims to being modern versions of the *griots* of the oral tradition. Reading knowledge of French recommended.

**440 African Cityscapes: Urbanization and Its Literary Representations (also Society for the Humanities 440 and French Literature 440)**

Spring. 4 credits.

T 2:30-4:25. J. Ngate.

The course will seek to make sense of the evolving fate of the city in African literature in French: from being presented almost exclusively as a deathtrap for the colonized, the city has now become that ambiguous space in which it is increasingly difficult to say what it means to be African. Reading knowledge of French recommended.

**450 Renaissance Poetry (also Comparative Literature 650)**

Fall. 4 credits.

M 2:30-4:25. W. J. Kennedy.

A reading and discussion of key texts in lyric poetry from Italian, French, English, and other European literatures of the Renaissance. Topic for 1990: Petrarchan love poetry by women and homosexual poets. Texts by Stampa, Michelangelo, Labé, and Shakespeare.

**[451 Renaissance Epic (also Comparative Literature 651)]**

Spring. 4 credits. Not offered 1990-91.

R 2:30-4:25. W. J. Kennedy.

A reading and discussion of key texts in narrative epic and chivalric romance from Italian, French, English, and other European literatures of the Renaissance. Topic for 1991: Ariosto, Rabelais, and Spenser.]

**460 Rhetorical Conventions and European Lyric**

Fall. 4 credits.

R 2:30-4:25. G. Davis.

This course will focus on a few major rhetorical strategies that have been central to the discourse of European lyric. On the assumption that these strategies may reflect universal principles of rhetoric, the class will analyze and compare lyric poetry from diverse cultural traditions (including anglophone and francophone post-colonial literatures) and

historical periods (ranging from Classical Antiquity to the present). Our explorations of rhetoric across national and cultural boundaries will attend to conventions (especially recurrent *topoi*) as well as to purely formal modes of organization. Examples of seminal devices we will study are the "priamel," the "recusatio" (generic disavowal), and "hymnal style." Our discussion will take account of pertinent aspects of rhetorical theory—from Aristotle's *Rhetoric* to modern linguistics (especially speech act theory and pragmatics). Proficiency in at least one foreign language is required.

**482 Latin American Women Writers (also Spanish Literature 492 and Women's Studies 481)**

Spring. 4 credits. Taught in English.

T R 10:10-11:25. D. Castillo.

This course will provide a sampler of novels and short stories by and about Latin American women. We will look at the question of self-construction and issues such as the social and political concerns involved in a specifically Latin American feminine identity. All works will be read in translation (romance studies students should read originals of the two works from the Spanish.) Authors may include writers like Luiza Valenzuela (Argentina) and Rigoberta Menchú (Guatemala), Helena Parente Cunha and Clarice Lispector (Brazil), Helena Maria Viramontes and the Anzaldúa/Moraga anthology *This Bridge Called My Back* (U.S.A.), and Simone Schwarz-Bart (Guadalupe).

**490 From Literary Criticism to Marxist Theory: The Early Georg Lukács (also German Studies 490 and Government 470)**

Fall. 4 credits. The course is designed for advanced undergraduates and graduate students.

R 1:25-3:20. P. U. Hohendahl.

The writings of the late Lukács have occasionally obscured the importance of the young Lukács for the project of Western Marxism and critical theory. The seminar will reexamine the beginnings of neo-Marxist theory as it emerges out the integration of neo-romantic cultural criticism and contemporary social theory (Simmel, Weber). The analysis will focus on Lukács's seminal texts, especially on *Soul and Form*, *Theory of the Novel*, and *History and Class Consciousness*.

**491 Mass Culture Revisited: From Popular Literature to the Culture Industry (also German Studies 491 and Society for the Humanities 491)**

Fall. 4 credits. For advanced undergraduates and graduate students; taught in English.

Reading knowledge of German required.

T 1:25-3:20. P. U. Hohendahl.

The purpose of this seminar is twofold: it is designed to engage in a critical dialogue with older and recent theoretical writings on mass culture (Adorno, Bausinger, C. Bürger, Howe, Huyssen, Jameson, L. Levine, MacDonald, Schenda); also, it is intended to investigate the emergence of modern mass culture in Germany. Historically, the course will focus on the period between 1830 and 1900 by tracing the transition from traditional forms of popular literature to its recasting after the industrial revolution. Special attention will be given to the relationship between established high culture and popular culture through an analysis of canon formation on the one hand and an examination of the critical and pedagogical discourse on popular literature on the other. Readings will be taken from the works of

popular novelists, such as Marlitt, Courths-Mahler, Karl May, and Ganghofer. The discussion of their texts will include structural as well as contextual problems (literacy, reading public, book market).

**493 Senior Essay**

Fall and spring. 8 credits.

TBA. Staff.

Hours to be arranged individually in consultation with the Director of Undergraduate Studies. Approximately fifty pages to be written over the course of two semesters in the student's senior year under the direction of the student's adviser. Credit for the first semester will be awarded upon completion of the second semester.

**494 Contemporary Fiction**

Fall. 4 credits. Limited to 15 students. Core course for majors.

W 1:25-3:20. W. Cohen.

A survey of the period since the end of World War Two, focusing on the global impact and transformations of an originally European form. Emphasis on the power relations among various languages, nations, social systems, and continents in the modern world system. Discussion of race and empire, as well as of gender and class. Viewing of a few films; reading in history, criticism, literary theory, and social theory. Primary texts, in the following order: Nabokov, *Lolita*; Duras, *Hiroshima, Mon Amour*; Abe Kobo, *The Woman in the Dunes*; Achebe, *Things Fall Apart*; García-Márquez, *One Hundred Years of Solitude*; El Saadawi, *God Dies by the Nile*; Rushdie, *Midnight's Children*; Kundera, *The Unbearable Lightness of Being*; Wang Anyi, *Bao Town*. One oral presentation, one five-page paper, and one ten to fifteen-page paper.

**497 Heidegger on Language, Art, and Poetry (also Romance Studies 497)**

Fall. 4 credits.

T 2:30-4:25. C. Arroyo.

A study of "Language;" "The Origin of the Work of Art;" "What Are Poets For;" "Being, Dwelling, Thinking;" "The Question Concerning Technology;" and the "Letter on Humanism."

**[498 Language Poetry (also English 468)]**

Spring. 4 credits. Core course for majors. Not offered 1990-91.

W 1:25-3:20. J. Monroe.

The emergence in the United States in the 1970s and 1980s of "Language Poetry" or "Language Writing" as a challenge to more familiar modes of contemporary poetry raises fundamental questions about what poetry has been, is, and should be and about the relationship between poetry, audience, and social transformation. Focusing on texts by Charles Bernstein, Bob Perelman, Ron Silliman, Rosemarie Waldrop, and others associated with the Language Poetry movement, we will explore the movement's acknowledged indebtedness to such precursors as Gertrude Stein, Louis Zukovsky, and Robert Creeley and to philosophical and theoretical writings by such figures as Ferdinand de Saussure, Valentin Voloshinov, and Ludwig Wittgenstein. Considering as well Language Poetry's critical reception over the past several years, we will attempt to arrive at an understanding of the movement's significance for theories of the avant-garde and the conditions of postmodern culture.]



**603 History of Literary Theory (also Comparative Literature 403)**

Spring. 4 credits.

M 2:30-4:25. W. J. Kennedy.

For description, see Comparative Literature 403.

**615 Language of Myth (also Anthropology 610 and Classics 610)**

Spring. 4 credits.

T 1:25-4:25. P. Pucci, J. Siegel.

An analysis of the theories on Language leading to Levi-Strauss and Derrida. Myths and the notion of "the father."

**619-620 Independent Study**

619, fall; 620, spring. Variable credit. Comparative Literature 619 and 620 may be taken independently of each other.

Hours to be arranged. Staff.

**635 Russian Literary Criticism of the Twentieth Century (also Russian Literature 635)**

Fall. 4 credits.

W 3:35-5:35. P. Carden.

For description, see Russian Literature 635.

**650 Renaissance Poetry (also Comparative Literature 450)**

Fall. 4 credits.

M 2:30-4:25. W. J. Kennedy.

For description, see Comparative Literature 450.

**[651 Renaissance Epic (also Comparative Literature 451)]**

Spring. 4 credits. Not offered 1990-91.

R 2:30-4:25. W. J. Kennedy.

For description, see Comparative Literature 451.]

**660 Visual Ideology (also German Studies 660)**

Spring. 4 credits.

R 3:35-5:30. G. Waite.

For description, see German Studies 660.

**680 Baudelaire and the Lyric**

Spring. 4 credits.

T 10:10-12. J. Culler.

Study of the modern lyric, with special reference to *Les Fleurs du Mal* and to conceptions of the lyric implicit in interpretations by such critics as Benjamin, Jauss, de Man, and Riffaterre. Emphasis will fall on questions of gender and intertextuality, including the relations of Baudelaire's poems to other poetic and non-literary discourses. Reading knowledge of French required.**COMPUTER SCIENCE**

G. Bilardi, K. Birman, B. Bloom, T. Coleman, R. L. Constable, B. Donald, D. Gries, J. Hartmanis, J. E. Hopcroft, D. Howe, D. Huttenlocher, D. Kozen, K. Marzullo, K. Pingali, G. Salton, F. B. Schneider, A. Segre, D. Subramanian, R. Teitelbaum, S. Toueg, C. Van Loan, S. Vavasis, V. Vazirani

The Department of Computer Science is in both the College of Arts and Sciences and the College of Engineering. A student in either college can major in computer science. The following describes the College of Arts and Sciences major.

**The Major**

The major has three components: a core (a minimum of 42 credits), a group of electives in computer science and related fields (a minimum of 10 credits), and a concentration outside computer science (a minimum of 14 credits). The core focuses on the central topics within computer science: the logical design of programs, data structures, and algorithms. The remaining components of the major—the related electives and the outside concentration—provide a flexible extension to the core program. In consultation with their advisers, students are expected to choose electives and an outside concentration that best suit their graduate and career plans.

Students interested in pursuing an advanced degree in theoretical computer science should concentrate in mathematics. Students preparing for advanced work in scientific computation should take Computer Science 621 (instead of Computer Science 222) and Computer Science 622 (as a related elective) and concentrate in some branch of applied mathematics. Qualified students are encouraged to concurrently major in mathematics.

**Admission**

The prerequisites for admission to the major are:

- 1) Completion of Computer Science 100-211-(or 212)-280 (or equivalent)
- 2) Completion of Mathematics 111-122-221 or Mathematics 191-192-293
- 3) A 2.75 grade-point average in all computer science and mathematics courses
- 4) Acceptance by the department's admissions committee

After admission, students are expected to maintain at least a 2.75 grade-point average in their major courses. Any grade below C- in a core course or related elective is not acceptable.

**Core**

The core consists of the following courses:

- 1) Calculus and linear algebra: Mathematics 111-122-221-222 or 191-192-293-294
- 2) Programming and systems: Computer Science 100, 211 (or 212), 314 and 410
- 3) Theory of computation: Computer Science 280, 381 (or 481), and 482. (One of the following may be substituted for Computer Science 280: Mathematics 332, 432, 434, or 481.)
- 4) Numerical analysis: Computer Science 222 or 421

**Related Electives**

The related electives requirement consists of three courses. One must be a computer science course or course/laboratory combination numbered above 400 that includes a substantial programming project, for example, Computer Science 412, 414/415, 417/418, 432/433 or 472/473; the other two are to be selected from the following:

Electrical engineering courses numbered 230 or higher

Operations research courses numbered 260 or higher

Mathematics courses numbered 411 or higher

Computer Science courses numbered 400 or above (except Computer Science 415, 418, 433, 600, 601, and seminar courses)

Students are expected to select related electives that complement their concentration.

**Concentration**

This component encourages the student to study some discipline outside of computer science in reasonable depth. The concentration consists of an approved sequence of four courses (at least 14 credits) numbered 200 or higher in some field related to the theoretical or practical aspects of computing. A list of approved concentrations is available in the Computer Science Undergraduate Office, 303 Upson Hall. Students may also design their own concentrations, subject to the approval of their adviser.

**Other Requirements**

Computer science majors must also satisfy the College of Arts and Sciences and university requirements. In particular, the spirit of the 15-credit electives requirement will be strictly followed. This requirement helps ensure breadth of education, and consequently no computer- or mathematics-related course can be used toward its fulfillment. In general, no courses may be used to fulfill more than one requirement. There are two exceptions: first, appropriate core courses may be used to satisfy the group IV distribution requirement, and second, in the case of a double major, the same course may be applied to both majors.

Probability and statistics courses. Computer science majors are encouraged to include at least one course in the field of probability and statistics in their program of study. Although there is no formal department of statistics at Cornell, the Department of Mathematics and the School of Operations Research and Industrial Engineering offer a wide range of probability and statistics courses suitable for computer science majors, including the following introductory two-course sequences:

Math 471, Basic Probability

Math 472, Statistics

OR&amp;IE 260, Introductory Engineering Probability

OR&amp;IE 370, Introduction to Statistical Theory with Engineering Applications

A less rigorous but satisfactory one-semester introduction to probability and statistics is given in either of:

Math 370, Elementary Statistics

OR&amp;IE 270, Basic Engineering Statistics

**Honors.** A student may be granted honors in computer science on the recommendation of the Computer Science Academic Affairs Committee. The committee guidelines will generally be the following:

- 1) An overall grade-point average of not less than 3.25
- 2) A grade-point average for all computer science courses of not less than 3.5
- 3) Satisfactory completion of at least two computer science courses numbered above 600 or satisfactory completion of a significant special investigation (Computer Science 490).

## Courses

For complete course descriptions, see the computer science listing in the College of Engineering section.

### 100 Introduction to Computer Programming (also Engineering 100)

Fall, spring, or summer. 4 credits. Students who plan to take both Computer Science 101 or 102 and 100 must take 101 or 102 first.

2 lecs, 1 rec (optional). 3 evening exams.

### 101 The Computer Age

Fall or summer. 3 credits. Credit is granted for both Computer Science 100 and 101 only if 101 is taken first.

2 lecs, 1 rec. 1 evening exam.

### 102 Introduction to Microcomputer Applications (also Agricultural Engineering 102)

Fall. 3 credits. Each lab section limited to 16 students. May be taken only for out-of-college credit by students in the College of Arts and Sciences. Not open to students in the College of Engineering or to students who have taken any prior computer courses at Cornell. Students in statutory colleges must enroll in Agricultural Engineering 102.

2 lecs, 1 lab. 2 evening exams.

### 107 An Introduction to SCHEME

Spring. 1 credit. Prerequisite: Introductory course in PASCAL, or equivalent programming experience.

1 lec.

### 172 An Introduction to Artificial Intelligence

Spring. 4 credits. Prerequisites: Computer Science 100 or 101; and precalculus level math.

3 lecs, 2 evening exams.

### 211 Computers and Programming (also Engineering 211)

Fall, spring, or summer. 3 credits. Prerequisite: Computer Science 100 or equivalent programming experience. Credit will not be granted for both Computer Science 211 and Computer Science 212.

2 lecs, 1 rec. 2 evening exams.

### 212 Modes of Algorithmic Expression

Fall. 4 credits. Prerequisite: Computer Science 100 or equivalent programming experience. Credit will not be granted for both Computer Science 211 and Computer Science 212.

2 lecs, 2 recs. 2 evening exams.

### 222 Introduction to Scientific Computation (also, Engineering 222)

Spring. 3 credits. Prerequisites: Computer Science 100 and Mathematics 112, 122, or 192.

2 lecs, 1 rec. 2 evening exams.

### 280 Discrete Structures

Fall or spring. 4 credits. Prerequisite: Computer Science 211 or 212 or permission of instructor.

3 lecs.

### 314 Introduction to Computer Systems and Organization

Fall, spring, or summer. 4 credits. Prerequisite: Computer Science 211 or 212 or equivalent.

2 lecs, 1 sec. 2 evening exams.

### 381 Introduction to Theory of Computing

Fall. 4 credits. Prerequisite: Computer Science 280 or permission of instructor.

3 lecs.

### 400 The Science of Programming

Spring. 4 credits. Prerequisite: Computer Science 280 or equivalent.

3 lecs.

### 405 Science and the Computer

Fall. 4 credits. Prerequisites: Juniors and seniors only, some scientific computing experience recommended. Not offered every year.

2 lecs, 2 evening exams.

### 410 Data Structures

Fall or spring or summer. 4 credits. Prerequisite: Computer Science 280 or permission of instructor.

2 lecs. 2 evening exams.

### 411 Programming Languages and Logics

Spring. 4 credits. Enrollment limited. Prerequisites: Computer Science 410 or permission of instructor. Not offered every year.

2 lecs.

### 412 Introduction to Compilers and Translators

Spring. 4 credits. Prerequisites: Computer Science 314, 381, and 481. Not offered every year.

3 lecs.

### 414 Systems Programming and Operating Systems

Fall. 3 credits. Prerequisite: Computer Science 314 or permission of instructor.

2 lecs. 2 evening exams.

### 415 Practicum in Operating Systems

Fall. 2 credits. Prerequisite: Computer Science 410. Corequisite: Computer Science 414.

1 lec.

### 417 Computer Graphics (also Architecture 374)

Fall. 3 credits. Prerequisite: Computer Science 211 or 212. Not offered every year.

2 lecs. 1 lab.

### 418 Practicum in Computer Graphics (also Architecture 375)

Fall. 2 credits. Prerequisite: Computer Science 211 or 212. Recommended: Computer Science 314. Corequisite: Computer Science 417. Not offered every year.

1 lab.

### 421 Numerical Solution of Algebraic Equations

Fall. 4 credits. Prerequisites: Mathematics 294 or 222, one additional mathematics course numbered 300 or higher, and knowledge of FORTRAN at the Computer Science 222 level.

3 lecs.

### 432 Introduction to Database Systems

Spring. 3 credits. Prerequisites: Computer Science 211 or 212 and Computer Science 410, or permission of instructor. Recommended: Computer Science 314.

2 lecs. 1 rec.

### 433 Practicum in Database Systems

Spring. 2 credits. Corequisite: Computer Science 432.

1 lab.

### 472 Foundations of Artificial Intelligence

Fall. 3 credits. Prerequisite: Computer Science 410. Open to juniors, seniors, and graduate students.

2 lecs, 1 sec.

### 473 Practicum in Artificial Intelligence

Spring. 2 credits. Prerequisites: Computer Science 107 or 212, Computer Science 280 and 410. Corequisite: Computer Science 472.

1 lab.

### 481 Introduction to Theory of Computing

Spring. 4 credits. Prerequisite: Computer Science 280 or permission of instructor. Credit will not be granted for both Computer Science 381 and Computer Science 481.

3 lecs.

A faster-moving and deeper version of Computer Science 381. Corrective transfers between Computer Science 481 and 381 (in either direction) are encouraged during the first few weeks of instruction.

### 482 Introduction to Analysis of Algorithms

Spring. 4 credits. Prerequisites: Computer Science 410 and Computer Science 381 or 481, or permission of instructor.

3 lecs.

### 486 Applied Logic (also Mathematics 486)

Spring. 4 credits. Prerequisites: Mathematics 222 or 294, Computer Science 100, and an additional course in mathematics or theoretical computer science.

2 lecs, 1 lab to be arranged.

### 490 Independent Reading and Research

Fall or spring. 1-4 credits.

### 600 Computer Science and Programming

Fall. 1 credit. Prerequisite: graduate standing in computer science or permission of instructor.

1 lec.

### 601 Introduction to Programming Logics

Spring. 1 credit. Prerequisite: graduate standing in computer science or permission of instructor.

1 lec.

### 611 Advanced Programming Languages

Fall. 4 credits. Prerequisites: Computer Science 410, and 381 or 481, or permission of instructor.

3 lecs.

### 612 Compiler Design for High-Performance Architectures

Spring. 4 credits. Prerequisites: Computer Science 314, 410, and 412, or permission of instructor.

3 lecs.

### 613 Concurrent Programming

Spring. 4 credits. Prerequisites: Computer Science 414 and 600 or permission of instructor.

3 lecs.

### 614 Advanced Systems

Spring. 4 credits. Prerequisite: Computer Science 414 or permission of instructor.

2 lecs.

### [615 Machine Organization

Spring. 4 credits. Prerequisite: Computer Science 314 or permission of instructor. Not offered every year.]

### 616 RISC Microprocessor Design

Spring. 4 credits. Prerequisite: permission of instructor. Not offered every year.

2 lecs.

**621 Matrix Computations**

Fall. 4 credits. Prerequisites: Mathematics 411 and 431 or permission of instructor.  
3 lecs.

**622 Numerical Optimization and Nonlinear Algebraic Equations**

Spring. 4 credits. Prerequisite: Computer Science 621.  
3 lecs.

**632 Database Systems**

Fall. 4 credits. Prerequisites: Computer Science 410 and Computer Science 432 or permission of instructor.  
2 lecs.

**635 Automatic Text Processing and Information Retrieval**

Spring. 4 credits. Prerequisite: Computer Science 410 or equivalent or permission of instructor.  
2 lecs.

**643 Design and Analysis of Computer Networks**

Fall. 4 credits. Prerequisite: Computer Science 414 or permission of instructor. Not offered every year.  
2 lecs.

**655 Mathematical Foundations for Computer Modeling and Simulation (also Mathematics 655)**

Fall. 4 credits. Prerequisites: Mathematics 431 and 432, or the equivalent in both content and level of mathematical sophistication or permission of instructor. Not offered every year.  
3 lecs.

**661 Robotics**

Fall. 4 credits. Prerequisites: Computer Science 482 and permission of instructor. Not offered every year.  
3 lecs.

**662 Robotics Laboratory**

Fall. 1 credit. Prerequisite: graduate standing or permission of instructor. Not offered every year.  
1 lab.

**664 Machine Vision**

Spring. 4 credits. Prerequisites: undergraduate-level understanding of algorithms, knowledge of differential equations, and differential and transformational geometry are helpful.  
3 lecs.

**671 Introduction to Automated Reasoning**

Fall. 4 credits. Prerequisites: Computer Science 611 and 681 and Mathematics 581. Not offered every year.  
3 lecs.

**672 Artificial Intelligence Programming**

Spring. 4 credits. Prerequisite: Computer Science 472 or permission of instructor.  
3 lecs.

**681 Analysis of Algorithms**

Fall. 4 credits. Prerequisite: Computer Science 381 or 481, or permission of instructor.  
3 lecs.

**682 Theory of Computing**

Spring. 4 credits. Prerequisite: Computer Science 381 or 481, or permission of instructor.  
3 lecs.

**709 Computer Science Graduate Seminar**

Fall or spring. 1 credit. S-U grades only. For staff, visitors, and graduate students interested in computer science.

**711 Topics in Programming Languages and Systems**

Spring. 4 credits. Prerequisites: Computer Science 381 or 481 and Computer Science 611, or permission of instructor. Not offered every year.  
2 lecs.

**712 Topics in Programming Languages and Systems**

Spring. 4 credits. Prerequisite: Computer Science 612 or permission of instructor. Not offered every year.  
2 lecs.

**713 Seminar in Systems and Methodology**

Fall or spring. 4 credits. Prerequisites: Computer Science 414 and an advanced systems course such as CS613, 614, 632, or 643, or permission of instructor. Not offered every year.  
2 lecs.

**714 Distributed Computing**

Spring. 4 credits. Prerequisites: Computer Science 414 and an advanced systems course (e.g., Computer Science 613, 614, 632, or 643) or permission of instructor. Not offered every year.  
2 lecs.

**715 Seminar in Programming Refinement Logics**

Fall or spring. 4 credits. Prerequisite: permission of instructor.

**717 Topics in Parallel Architectures**

Fall. 4 credits. Prerequisite: Computer Science 612 or permission of instructor. Not offered every year.  
2 lecs.

**719 Seminar in Programming Languages**

Fall or spring. 4 credits. Prerequisite: Computer Science 611 or permission of instructor. S-U grades only.

**721 Topics in Numerical Analysis**

Fall. 4 credits. Prerequisite: Computer Science 621 or 622, or permission of instructor. Not offered every year.  
2 lecs.

**722 Topics in Numerical Analysis**

Spring. 4 credits. Prerequisite: Computer Science 621 or 622 or permission of instructor. Not offered every year.  
2 lecs.

**729 Seminar in Numerical Analysis**

Fall or spring. 1-4 credits (to be arranged). Prerequisite: permission of instructor. S-U grades only.

**[733 Selected Topics in Information Processing**

Not offered every year.  
2 lecs.]

**734 Seminar in File Processing**

Fall. Credit to be arranged. Prerequisite: Computer Science 733 or permission of instructor. Not offered every year.

**739 Seminar in Text Processing and Information Retrieval**

Fall or spring. Credit to be arranged. Prerequisite: Computer Science 635 or permission of instructor. S-U grades only.

**[743 Topics in Fault-Tolerant Distributed Computing**

Prerequisite: Computer Science 614, 643, or 714. Not offered every year.  
1 lec.]

**747 Seminar in Program Logic and Semantics**

4 credits. Prerequisite: permission of instructor. S-U grades only. Not offered every year.

**749 Seminar in Systems Modeling and Analysis**

Fall or spring. 4 credits. Prerequisite: permission of instructor. Not offered every year.

**771 Topics in Artificial Intelligence**

4 credits. Prerequisite: permission of instructor. Not offered every year.

**772 Seminar in Advanced Robotics**

4 credits. Prerequisite: permission of instructor. Not offered every year.

**774 Proseminar in Cognitive Studies II (also Cognitive Studies 774 and Linguistics 774)**

Spring. 4 credits. Prerequisite: permission of instructor.

**779 Seminar in Machine Learning**

Fall or spring. Credit to be arranged. Prerequisite: permission of instructor. S-U grades only.

**781 Topics in Analysis of Algorithms and Theory of Computing**

Fall. 4 credits. Prerequisites: Computer Science 681 and 682 or permission of instructor. S-U grades only. Not offered every year.  
2 lecs.

**782 Topics in Analysis of Algorithms and Theory of Computing**

Spring. 4 credits. Prerequisites: Computer Science 681 and 682 or permission of instructor. S-U grades only. Not offered every year.  
2 lecs.

**DANCE**

See listings under Department of Theatre Arts.

**DUTCH**

See Modern Languages and Linguistics.

## ECONOMICS

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The study of economics provides an understanding of the way economies operate and an insight into public issues. The department offers a broad range of undergraduate courses in such fields as money and banking international and comparative economics; econometrics; theory; history; growth and development; and the organization, performance, and control of industry.

### Social Science Distribution Requirement

The microeconomics distribution requirement can be fulfilled with any of the following:

Economics 101, Economics 201, or Economics 203.

The macroeconomics distribution requirement can be satisfied with any of the following:

Economics 102, Economics 202, or Economics 204.

### The Major

Students who wish to major in economics must have completed Economics 101 or Economics 203 and Economics 102 or Economics 204 or equivalent courses, and Mathematics 111, or its equivalent. A grade below a C will not be accepted for any of the above. Economics 203 satisfies both the introductory micro (Economics 101) and the intermediate micro (Economics 313) requirement. Similarly Economics 204 satisfies both the introductory macro (Economics 102) and intermediate macro (Economics 314) requirement.

Prospective majors should apply at the department office.

The requirements for the major beyond the introductory courses and Math 111 are: (1) Economics 313 or Economics 203, (2) Economics 314 or Economics 204, (3) Economics 319 or Economics 321, and (4) 20 credits of other economics courses listed by the Department of Economics, except that Economics 399 will not count toward the 20-credit requirement. With the permission of the major adviser, one or (in exceptional cases) two economics courses offered outside the College of Arts and Sciences may be applied to fulfill this requirement. Only courses in which a student receives a grade of C— or better will be counted towards satisfying the major requirements.

An honors program is currently being offered. Students should consult the director of undergraduate studies before May of their junior year for more information.

Students planning graduate work in economics or business are strongly encouraged to prepare themselves well in mathematics and econometrics. These students are strongly encouraged to enroll in Economics 319–320 rather than Economics 321.

### Courses

#### 101 Introductory Microeconomics

Fall, spring, or summer. 3 credits. Economics 101 is not a prerequisite for 102.

Lecs and disc.

Explanation and evaluation of how the price system operates in determining what goods are produced, how goods are produced, and who receives income, and how the price system is modified and influenced by private organizations and government policy.

#### 102 Introductory Macroeconomics

Fall, spring, or summer. 3 credits. Economics 101 is not a prerequisite for 102.

Lecs and disc.

Analysis of aggregate economic activity in relation to the level, stability, and growth of national income. Topics discussed may include the determination and effects of unemployment, inflation, balance of payments, deficits, and economic development, and how these may be influenced by monetary, fiscal, and other policies.

#### 105 Principles of Accounting

Summer only. 3 credits.

The principles of accounting essential to an understanding of cost control. Cost accounting: analysis and interpretation of financial statements.

#### 201 Introduction to the American Economy

Fall. 3 credits. Prerequisites: not open to freshmen or to students who have taken any prior economics courses at Cornell.

This course is intended for students who do not plan to take advanced courses in economics. The sequence Economics 201–202 covers the same topics as are taught in Economics 101–102. The course is designed to teach the basic knowledge of economics needed to understand how economic systems function, but it will emphasize analysis of current issues. The meetings of the class are arranged by topic and will be taught by senior faculty members who specialize in the particular topics.

#### 202 Introduction to the World Economy

Spring. 3 credits. Prerequisites: not open to freshmen or to students who have taken any prior economics courses at Cornell.

This course is intended for students who do not plan to take advanced courses in economics. A continuation of Economics 201 with a focus on international issues.

#### 203 Microeconomics

Fall. 4 credits. Prerequisite: calculus.

Intended for students with strong analytical skills who have not taken Economics 101, 102, 201, or 202. Can be used to replace both Economics 101 and 313. This course covers the topics taught in Economics 101 and 313. An introduction to the theory of consumer and producer behavior and to the functioning of the price system.

#### 204 Macroeconomics

Spring. 4 credits. Prerequisite: calculus.

Intended for students with strong analytical skills who have not taken Economics 101, 102, 201, or 202. Can be used to replace both Economics 102 and 314. This course covers the topics taught in Economics 102 and 314. An introduction to the theory of national income determination, unemployment, growth, and inflation.

#### 205 Managerial Accounting for Planning and Control

Summer only. 3 credits. Prerequisite: a course in accounting or equivalent experience or permission of instructor.

An extension of Economics 105. Considers the accounting process primarily from a managerial rather than a financial point of view. The basics of accounting systems and financial statements are reviewed and extended to provide a basis for comparing financial and managerial perspectives. Manufacturing cost systems, operational budgeting, standard costing, and short-term managerial decision making.

#### 301 Economics of Market Failure

Fall. 4 credits. Prerequisites: Economics 101–102.

The course will review briefly the welfare properties of the perfectly competitive market model and will then consider a range of situations in which these properties are modified and where there may be a case for some form of government intervention. The cases to be considered will include (a) the presence of externalities, pollution, and the economics of the environment; (b) the provision of public goods, the free-rider problem; (c) uncertainty and imperfect information, an analysis in the context of labor and insurance markets, and the market for medical care; (d) the regulation of natural monopoly and public utility pricing; (e) the failure of the market to achieve desired redistributive objectives; (f) direct and indirect taxation as instruments of redistribution.

#### 302 The Impact and Control of Technological Change (also Government 302 and City and Regional Planning 440)

Spring. 4 credits.

Examines social, environmental, and economic implications of technological change in the United States in the context of possible policies and strategies of control. Several specific cases will be considered in detail, followed by a broader investigation of the problems of a modern technological society. Alternative political-economic solutions will be explored.

#### 303 Positive and Normative Theories of Income Distribution

Spring. 4 credits. Enrollment limited.

Prerequisite: permission of instructor. Cannot be applied to the major.

After examining the distinction between the terms positive and normative as used in economics, this course will explore three main questions: (1) Why is income distributed the way it is? (2) How should income be distributed? (3) What is the relationship between 1 and 2? Particular emphasis will be given to those theories of income distribution, both positive and normative, that tend to dominate discussion of these topics in America.



**304 Economics and the Law**

Fall. 4 credits. Prerequisite: Economics 101 is required; Economics 311 or 313 or their equivalent is recommended.

An examination, through the lens of economic analysis, of legal principles drawn from a variety of legal fields, including contracts, property, torts, and procedure. No legal training is required.

**306 Economics of Defense Spending**

Spring. 4 credits. Prerequisites: Economics 101–102.

The economic aspects of defense spending are analyzed. Emphasis is on the procurement of weapons systems. Topics covered include an overview of the defense budget, special characteristics of the defense market, the structure of the defense industry, and the economic behavior of defense firms.

**308 Economic Analysis of Government (also Civil and Environmental Engineering 322)**

Spring. 4 credits. Prerequisites: calculus plus Economics 313 or equivalent or Civil and Environmental Engineering 321.

Analysis of economic bases for government intervention in a market economy. Topics include public goods, cost-benefit analysis, public finance, environment regulation and risk management, and macroeconomic topics.

**311 Intermediate Microeconomic Theory**

Summer only. 4 credits. Prerequisites: Economics 101–102 or permission of instructor. The pricing processes in a private enterprise economy are analyzed under varying competitive conditions, and their role in the allocation of resources and the functional distribution of national income is considered.

**312 Intermediate Macroeconomic Theory**

Summer only. 4 credits. Prerequisites: Economics 101–102 or permission of instructor. The theory of national income determination and economic growth in alternative models of the national economy is introduced. The interaction and relation of aspects of these models of empirical aggregate economic analysis is examined.

**313 Intermediate Microeconomic Theory**

Fall, spring, or summer. 4 credits. Prerequisites: Economics 101–102 and calculus. For description see Economics 311.

**314 Intermediate Macroeconomic Theory**

Fall, spring, or summer. 4 credits. Prerequisites: Economics 101–102 and calculus. For description see Economics 312.

**315 History of Economic Analysis**

Fall. 4 credits. Prerequisites: Economics 101–102 or permission of instructor. Early writings in economics and their relationship to current economic analysis and policy issues, for example, ancient and medieval philosophers on justice in exchange; mercantilist arguments for trade protection; early theories about the effect of monetary expansion (D. Hume); the role of the entrepreneur (Cantillon); and general competitive equilibrium (the Physiocrats). The most recent reading assignment in this course is Adam Smith's *Wealth of Nations* but the emphasis is on the relationship between the precursors of Adam Smith and his *Wealth of Nations* to modern economics analysis and current efforts to answer some of the questions raised in the early writing on economics.

**317 Intermediate Mathematical Economics I**

Fall. 4 credits.

Introduction of calculus and matrix algebra; problems of maximization of a function of several variables. Economic examples are used to illustrate and teach the mathematical concepts.

**318 Intermediate Mathematical Economics II**

Spring. 4 credits.

Advanced techniques of optimization and application to economic theory.

**319 Introduction to Statistics and Probability**

Fall or summer. 4 credits. Prerequisites: Economics 101–102 and calculus (Mathematics 111 or equivalent).

This course provides an introduction to statistical inference and to principles of probability. It includes descriptive statistics, principles of probability, discrete and continuous distributions, and hypothesis testing (of sample means, proportions, variance). Regression analysis and correlation are introduced.

**320 Introduction to Econometrics**

Spring or summer. 4 credits. Prerequisites: Economics 101–102, 319, or equivalent.

Introduction to the theory and application of econometric techniques. How econometric models are formulated, estimated, used to test hypotheses, and used to forecast; understanding economists' results in studies using regression model, multiple regression model, and introduction to simultaneous equation models.

**321 Applied Econometrics**

Fall or spring. 4 credits. Prerequisites: Economics 101–102 and calculus.

This course provides an introduction to statistical methods and principles of probability. Topics to be covered include analysis of data, probability concepts and distributions, estimation and hypothesis testing, regression, correlation and time series analysis. Applications from economics are used to illustrate the methods covered in the course.

**323 American Economic History**

Fall. 4 credits.

Problems in American economic history from the first settlements to early industrialization are surveyed.

**324 American Economic History**

Spring. 4 credits. Prerequisites: Economics 101–102 or permission of instructor.

A survey of problems in American economic history from the Civil War to World War I.

**325 Economic History of Latin America**

Spring. 4 credits. Open to upperclass students with some background in economics or history, or with permission of instructor.

**326 History of American Enterprise**

Spring. 4 credits. Prerequisites: Economics 101–102 or equivalent.

History of the changing structure of American business from 1800 to the present, with major emphasis upon developments after the Civil War. The focus of the course will be the changing structure of challenges (for example, the rise of unions, development of a national capital market, changing role of government) and the various responses of business organizations and entrepreneurs to those challenges.

**329 Eastern Europe Today: Economics, Government, Culture (also Government 326 and Russian 329)**

Fall. 4 credits.

Economics majors cannot use this course to fulfill major requirements. Introductory interdisciplinary survey of Poland, Hungary, Czechoslovakia, and Yugoslavia since World War II, with emphasis on contemporary development. The goals of the course are to examine differences (the variety of backgrounds) among East European countries, the common elements (for example, political relations with the USSR), domestic situations, the economy, and culture.

**330 The Soviet Union: Politics, Economics, and Culture (also Government 330 and Russian 330)**

Spring. 4 credits.

Economics majors cannot use this course to fulfill major requirements. Interdisciplinary survey of the USSR since the Revolution, with emphasis on contemporary developments.

**331 Money and Credit**

Fall. 4 credits. Prerequisites: Economics 101–102.

A systematic treatment of the determinants of the money supply and the volume of credit. Economic analysis of credit markets and financial institutions in the United States.

**333 Theory and Practice of Asset Markets**

Spring. 4 credits. Prerequisites: Economics 311 or 313, and 312 or 314, or their equivalents.

The theory and decision making in the presence of uncertainty and the practical aspects of particular asset markets are examined.

**335 Public Finance: The Microeconomics of Government**

Fall. 4 credits. Prerequisites: Economics 101–102 and 313, or their equivalent, and one semester of calculus, or permission of instructor.

The role of government in a free market economy is analyzed. Topics covered include public goods, market failures, allocation mechanisms, optimal taxation, effects of taxation, and benefit-cost analysis. Current topics of an applied nature will vary from term to term.

**336 Public Finance: Resource Allocation and Fiscal Policy**

Spring. 4 credits. Prerequisites: Economics 101–102, 313 or their equivalent and one semester of calculus, or permission of instructor.

A continuation of Economics 335 covering macroeconomics and special topics. Subjects covered include the federal debt, the budget, and government regulation and transfers, as well as problems like local public goods, the hierarchy of governmental structure, plus a variety of applied problems.

**338 Macroeconomic Policy**

Fall or spring. 4 credits. Prerequisites: Economics 312 or 314 or equivalent.

The use of fiscal and monetary policies for achieving full employment, price-level stability, and appropriate economic growth are studied.

**341 Labor Economics**

Fall. 4 credits. Prerequisites: Economics 101–102.

**342 Economic Analysis of the University**  
Spring. 4 credits. Prerequisite: ILR 240 or Economics 311 or 313 or their equivalent.

This course seeks to illustrate the complexity of decision making in a nonprofit organization and to show how microeconomic analysis in general, and labor market analysis in particular, can be usefully applied to analyze resource allocation decisions at universities. Among the topics covered are financial aid, tuition, and admissions policies, endowment policies, faculty salary determination, the tenure system, mandatory retirement policies, merit pay, affirmative action, comparable worth, collective bargaining, resource allocation across and within departments, undergraduate versus graduate education, research costs, libraries, athletics, and "socially responsible" policies.

**347 Economics of Evaluation**  
4 credits.

An introduction to the methodologies used by economists to evaluate the impacts of social-action programs and legislation. General evaluation methodology, cost-benefit analysis, and econometrics are discussed. Case studies are considered to illustrate the uses of these techniques, to acquaint the student with major current government programs and legislation, and to estimate these programs' economic impacts. Throughout, the primary analytic framework used by the instructor is microeconomics.

**351 Industrial Organization**

Fall. 4 credits. Prerequisite: Economics 101 is required; 311 or 313 or their equivalent is recommended.

A study of markets that differ from the ideal of perfect competition (e.g., monopoly and oligopoly) and the efforts of our legal system through the antitrust laws to deal with the kinds of problems that arise in such markets. Specific topics covered include mergers, price fixing, price discrimination, predatory pricing, and vertical restraints such as resale price maintenance.

**352 Advanced Topics in Industrial Organization**

Spring. 4 credits. Prerequisites: Economics 101 and 351 and some knowledge of calculus. Recommended strongly: Economics 311, or equivalent.

This course is an extension of 351 and will emphasize (a) more-advanced topics in the theory of industrial organization with special attention to recent developments in the literature; and (b) empirical analysis of numerous issues relating to the structure of markets and their performance.

**354 Economics of Regulation**

Fall or spring. 4 credits. Prerequisite: Economics 313 or equivalent or Civil and Environmental Engineering 321. Explores technological bases for government intervention in the private market economy, which include decreasing cost industries (natural monopolies) and technical externalities (pollution and risk). The economic implications of regulating electric, gas, and communications and transportation utilities, including pricing, service quality, efficiency incentives, and long-range planning issues, are examined in detail. Topics on environmental protection and societal risk management are also explored.

**355 Departures from Rational Choice**  
Fall. 4 credits. Prerequisites: Economics 313 and 314, or their equivalents.

This course examines behaviors that appear inconsistent with the traditional theory of rational choice. These behaviors fall under two broad categories: (1) irrational behavior with regret, and (2) irrational behavior without regret. The first category includes, but is not limited to, behaviors that result from cognitive errors. Once people are made aware of these errors, they typically express a desire to modify their behavior in the directions called for by rational choice theory. The second category represents a deeper challenge to the traditional model. It consists of behaviors that people generally express no desire to modify despite their inconsistency with rational choice theory.

**357 Economics of Imperfect Information**  
Spring. 4 credits. Prerequisites: Economics 101-102 and calculus.

This course covers a variety of topics in the economics of uncertainty, including basic decision theory, search theory, risk insurance, and equilibrium price dispersion.

**358 Current Economic Issues**

Fall or spring. 3 or 4 credits. (A research paper will be required if the 4-credit option is chosen.) Prerequisites: Economics 101-102. The emphasis will be on the application of simple microeconomics and industrial organization concepts to the formulation of public policy in the present and recent past. Among the topics likely to be covered will be policies relating to energy, communications, and transportation; the financing and delivery of medical care, public utility, and other kinds of regulation; and the economics of inflation.

**361 International Trade Theory and Policy**

Fall. 4 credits. Prerequisites: Economics 101-102, 314, and calculus. This course surveys the sources of comparative advantage. It studies commercial policy and analyzes the welfare economics of trade between countries. Some attention is paid to the institutional aspects of the world trading system.

**362 International Monetary Theory and Policy**

Spring. 4 credits. Prerequisites: Economics 101-102, 314, and calculus. This course surveys the determination of exchange rates and theories of balance of payments adjustments. It also explores open economy macroeconomics, and it analyzes some of the institutional details of foreign exchange markets, balance of payments accounting, and the international monetary system.

**363 International Economics**

Fall. 4 credits. Prerequisite: Economics 101-102 or equivalent. This course surveys international economics in one semester. First, it surveys the sources of comparative advantage, and it analyzes commercial policy and the institutional aspects of the world trading system. Second, it discusses exchange rates, and it studies theories of balance of payments adjustments. This course is intended primarily for government majors who are comfortable with a less technical approach to international economics.

**365 Japanese Economy**

Summer only. 4 credits. Prerequisites: Economics 101-102 or a course in Far Eastern history or Far Eastern politics. The history and the present structure of the Japanese economy, concentrating on its two periods of "miraculous" growth and development and on contemporary Japanese-American economic relations.

**366 The Economy of the Soviet Union**  
Fall. 4 credits. Prerequisites: Economics 101-102.

A survey of the Soviet economic system and Soviet economic development since 1917. Both institutional and theoretical aspects will be considered. Emphasis will be on current developments, including East-West economic competition, economic relations with the Eastern Bloc and with Western Europe, and foreign trade.

**367 Comparative Economic Systems: Soviet Union and Europe**

Fall. 4 credits. Prerequisites: Economics 313-314, or equivalents, or permission of instructor.

Discussion of approaches to comparison of economic systems. Consideration of abstract models (market economy, central planning, decentralized socialist market) as well as national economies (France and Sweden, Yugoslavia, and Soviet Union). Possibility of convergence of economic systems is explored.

**368 Comparative Economics: United States, Europe, and the Soviet Union**

Spring or summer. 4 credits. Prerequisites: Economics 101-102. Intended for students who are not majoring in economics. European and Soviet economies after the Second World War are surveyed. The European countries studied include France and Sweden in the West, and Yugoslavia plus another country in the East. A descriptive and institutional approach is used.

**369 The Economy of China**

Fall. 4 credits. Prerequisites: Economics 101-102 or permission of instructor. Examines the development of the Chinese economy and the evolution of China's economic system since 1949.

**370 Issues in Poverty and Development**

Fall or spring. 4 credits. The course will introduce current issues and controversies in the field of development economics. Questions to be discussed will include: What are the obstacles to development according to the different schools of thought? Which countries have made significant progress in the last three decades and why? What are the policies that have been pursued, and how successful have they been? The required readings will be supplemented with outside speakers and film presentations.

**371 Economic Development**

Fall. 4 credits. Prerequisites: Economics 313 or equivalent. Study of the problem of sustaining accelerated economic growth in less-developed countries. Trade-offs between growth, welfare, and equity; the legacy of colonialism; relevance of history and economic theory; problems of capital formation, economic planning and international specialization; and the interaction of industrialization, agricultural development, and population change are emphasized.

**372 Applied Economic Development**

Fall or spring. 4 credits. Prerequisite: Economics 311, 313, or equivalent.

**373 International Specialization and Economic Development**

Fall or spring. 4 credits. Prerequisites: Economics 101–102 or permission of instructor. The assessment of the gains and risks and the appropriate role for specialization and trade in economic development; management of the external disequilibrium attending serious efforts to accelerate economic development; and the processes, institution, and opportunities for innovation in transferring income from the relatively developed countries to those less developed.

**374 National and International Food Economics (also Nutritional Sciences 457)**

Spring. 3 credits. Prerequisites: a college course in economics and junior standing or permission of instructor. Examination of individual components essential for an understanding of the U.S. and world food economies. Analysis of the world food economy. Review and analysis of (a) the major economic factors determining the demand for food, the composition of food consumption, and nutritional intake; and (b) the major economic factors affecting food production and supply. Examination and evaluation of the effectiveness of various food policies and programs in altering food consumption patterns. Principles of nutritional planning in developing countries within the context of the process of economic and social development.

**378 Economics, Population, and Development**

Fall or spring. 4 credits. The economic aspects of population and the interaction between population change and economic change are introduced. Particular attention is paid to economic views of fertility, mortality, and migration, and to the impact of population growth on economic growth, development, modernization, resources, and the environment.

**381 Economics of Participation and Workers' Management**

Spring. 4 credits. Prerequisites: Economics 101–102 or permission of instructor. The theory of labor-management economies is developed systematically, and literature on that and related subjects surveyed. Theories of the participatory firm, industry, and general equilibrium are covered together with a microeconomic theory and analysis of special dimensions of the system. Efficient decision-making processes within the firm are also studied. Illustrative references to Yugoslavia and other real instances of labor participation are made throughout.

**382 The Practice and Implementation of Self-Management**

Fall. 4 credits. A broad introduction to the subject of workers' self-management intended for both economists and non-economists. It contains no technical tools nor does it require prior professional knowledge: thus there are no prerequisites. The course objective is to answer 5 broad questions: (1) What is self-management? (2) Where and in what form does it occur? (3) What is its history? (4) How does it work? and (5) How is a cooperative enterprise/economy started/operated?

**383 Marxist Political Economy**

Summer only. 4 credits. Prerequisites: Economics 101–102 or permission of instructor. An intensive introduction to Marxist political economy. Close reading of selected original writings of Marx and Engels. An investigation and analysis of the historical development and current theory and method of Marxist political economy. Applications of that analysis, and current debates over issues such as crisis theory and Marxist-feminist analysis.

**399 Readings in Economics**

Fall or spring. Variable credit. Independent study.

**416 Intertemporal Economics**

Fall. 4 credits. Prerequisites: Economics 313 or equivalent, and calculus. This course is intended for advanced economics majors who are especially interested in economic theory. Topics to be covered: (a) review of the one good Ramsey model of optimal savings and accumulation; conditions for intertemporal efficiency in production; comparative dynamics and sensitivity analysis; (b) some earlier models of capital accumulation; the roles of present value and internal rate of return in guiding investment decisions; (c) growth, exhaustible resources; pollution and conservation: discussion of the trade-offs facing a society.

**419 Economic Decisions under Uncertainty**

Fall. 4 credits. Prerequisites: Economics 319 and calculus. This course provides an introduction to the theory of decision making under uncertainty with emphasis on economic applications of the theory.

**445 Topics in Microeconomic Analysis—Markets and Planning**

Fall or spring. 4 credits. Prerequisites: Economics 311, 313, or equivalent and one term of calculus. This is a course of economic theory designed for upperclass undergraduates. Course contents may vary from year to year. Issues that may be examined include (1) How can economic activities be efficiently organized through the market mechanism? Why is the presence of many traders essential to efficiency? (2) What can be done if the indivisibility in production processes becomes an important hindrance to competitive pricing? (3) How can economic planning be decentralized efficiently? This course serves two purposes: (1) to introduce concepts that are novel to undergraduates and relevant to public policy but require only a modicum of analytic tooling up, and (2) to illustrate the deductive approach of modern economic analysis—how to define concepts unambiguously, how to form propositions in clear-cut fashion, and how to follow up logical implications sequentially to the conclusion.

**446 Topics in Macroeconomic Analysis—Is Keynesianism Dead?**

Fall or spring. 4 credits. Prerequisites: Economics 312, 314, or equivalent and one term of calculus. The coverage of this course may vary from term to term. Presently the content of the course deals with the range of criticisms against Keynesian theory by the New Classical Economics, alias the Equilibrium School, alias the Rational Expectations School. Despite the fact that almost all intermediate macroeconomic textbooks are Keynesian in perspective,

clearly Keynesian economics is currently at bay. We shall review critically, critiques to Keynesian theory.

**448 Deficits, Debt and the Monetary System**

Fall or spring. 4 credits. Prerequisites: Economics 313 and 314 or their equivalent. History has witnessed many instances of fast growth of public debt—mostly the result of wars and depressions in the past, but also of peace-time deficits in recent times. Economic analysis has devoted a growing body of theoretical literature to examining the effects and the eventual outcomes of processes of debt accumulation: the variety of the results matches that of historical experiences.

The purpose of the course is to survey the relevant strands of theory, old and new, trying however to keep in touch with reality and history. The sustainability of debt growth is an elusive notion that will be critically examined with reference to alternative models and "regimes." Debt growth establishes an important intertemporal link between deficits and inflation that will be considered by studying the notion and the role of seigniorage. The policy problems posed by debt growth will be examined from three perspectives: means and ends of debt management; stabilization plans; the coexistence of high and low debt countries under an exchange rate agreement such as the European Monetary System.

**473 Economics of Export-led Development**

Fall or spring. 4 credits. Prerequisites: Economics 313, 314, or their equivalent. This course will examine the phenomenon of export-led development from both the theoretical and empirical points of view. Concentration will be on experiences within the West Pacific Rim.

**481 Economic Effects of Participation and Labor-Managed Systems**

Fall or spring. 4 credits. Prerequisites: Economics 381 and 382. This course applies microeconomic theory to analyzing the performance of firms in which employees either participate in the decision-making process or make all the important decisions. If a specialist in the area is lacking, Prof. Vanek may give the course as a seminar where primarily grad students will discuss topics in the literature selected through consensus of the participants.

**482 Practical Aspects of Business Management of Worker Enterprises**

Fall or spring. 4 credits. Prerequisite: should be taken concurrently with or following Economics 382/582, or by permission of instructor. This course is designed to further and deepen undergraduate and graduate students' knowledge of workers' self-management democratic enterprises. It will be based primarily on dialogue and participants' own presentations of their research in relevant areas such as cooperative business law, finance, accounting, or internal work organization. The instructor will act primarily as a coordinator and resource person. Whenever possible an attempt is made to form and incorporate a self-managing cooperative enterprise. Students who have taken all three courses, Economics 381/681, 382/682, and 482, both graduate and undergraduate, are welcome to participate as teacher-student interns. They may receive additional independent study credit for this work.

**483 The Technological and Product Base of Worker Enterprises, with Special Emphasis on Ecology and Solar Energy Applications**

Fall or spring. 4 credits. Prerequisite: may be taken concurrently with or following Economics 382/582, or with permission of instructor. This course is designed to deepen undergraduate and graduate students' knowledge of workers' self-management and cooperation, through learning about and construction of simple energy-related technologies, to be produced in workers' enterprises. Size of the class is limited by technical, space, and instruction resources. Some of the technologies may serve as a basis for projects to be undertaken in Economics 482.

**499 Honors Program**

Fall and spring. 8 credits. Consult the Director of Undergraduate Studies for details. Interested students should apply to the program in the spring semester of their junior year.

**Graduate Courses and Seminars**

**504 Economics and the Law**

Fall. 4 credits.  
For description see Economics 304.

**509 Microeconomic Theory I**

Fall. 4 credits.  
Topics in consumer and producer theory.

**510 Microeconomic Theory II**

Spring. 4 credits.  
Topics in consumer and producer theory, equilibrium models and their application, externalities and public goods, intertemporal choice, simple dynamic models and resource depletion, choice under uncertainty.

**513 Macroeconomic Theory: Static Income Determination**

Fall. 4 credits.

**514 Macroeconomic Theory: Dynamic Models, Growth, and Inflation**

Spring. 4 credits.

**516 Applied Price Theory**

Spring. 4 credits.  
The course emphasizes the applications of the principles of price theory to a variety of problems taken from concrete, practical settings.

**517 Intermediate Mathematical Economics I**

Fall. 4 credits.

**518 Intermediate Mathematical Economics II**

Spring. 4 credits.

**519 Econometrics I**

Fall. 4 credits. Prerequisites: Economics 319–320 or permission of instructor. This course gives the probabilistic and statistical background for meaningful application of econometric techniques. Topics to be covered are (1) probability theory: probability spaces, random variables, distributions, moments, transformations, conditional distributions, distribution theory and the multivariate normal distribution, convergence concepts, laws of large numbers, central limit theorems, Monte Carlo simulation; (2) statistics: sample statistics, sufficiency, exponential families of distributions. Further topics in statistics will be considered in Economics 520.

**520 Econometrics II**

Spring. 4 credits. Prerequisite: Economics 519. This course is a continuation of Economics 519 (Econometrics I) covering (1) statistics: estimation theory, least squares methods, method of maximum likelihood, generalized method of moments, theory of hypothesis testing, asymptotic test theory, and nonnested hypothesis testing and (2) econometrics: the general linear model, generalized least squares, specification tests, instrumental variables, dynamic regression models, linear simultaneous equation models, nonlinear models, and applications.

**523 American Economic History**

Fall. 4 credits.  
For description see Economics 323.

**524 American Economic History**

Spring. 4 credits.  
For description see Economics 324.

**525 Economic History of Latin America**

Spring. 4 credits.  
For description see Economics 325.

**535 Public Finance: Resource Allocation and Fiscal Policy**

Fall. 4 credits.  
For description see Economics 335.

**536 Public Finance: Resource Allocation and Fiscal Policy**

Spring. 4 credits.  
For description see Economics 336.

**548 Deficits, Debt and the Monetary System**

Fall or spring. 4 credits.  
For description see Economics 448.

**551 Industrial Organization**

Fall. 4 credits.  
For description see Economics 351.

**552 Public Regulation of Business**

Spring. 4 credits.  
For description see Economics 352.

**554 Economics of Regulation**

Fall or spring. 4 credits.  
For description see Economics 354.

**555 Politics and Markets**

Fall. 4 credits.  
For description see Economics 355.

**557 Economics of Imperfect Information**

Spring. 4 credits. Prerequisites: Economics 509 and statistics. The purpose of the course is to consider some major topics in the economics of uncertain information. Although the precise topics considered will vary from year to year, subjects such as markets with asymmetric information, signalling theory, sequential choice theory, and search theory will be discussed.

**561 International Trade Theory and Policy**

Fall. 4 credits.  
For description see Economics 361.

**562 International Monetary Theory and Policy**

Spring. 4 credits.  
For description see Economics 362.

**565 Economic Problems of Latin America**

Spring. 4 credits.

**567 Comparative Economic Systems: Soviet Union and Europe**

Fall. 4 credits.  
For description see Economics 367.

**569 The Economy of China**

Fall. 4 credits.  
For description see Economics 369.

**571 Economic Development**

Fall. 4 credits.  
For description see Economics 371.

**572 Applied Economic Development**

Fall or spring. 4 credits.  
For description see Economics 372.

**573 International Specialization and Economic Development**

Fall or spring. 4 credits.  
For description see Economics 373.

**578 Economics, Population, and Development**

Fall or spring. 4 credits.  
For description see Economics 378.

**581 Economics of Participation and Worker Management**

Spring. 4 credits.  
For description see Economics 381.

**582 The Practice and Implementation of Self-Management**

Fall. 4 credits.  
For description see Economics 382.

**599 Readings in Economics**

Fall or spring. Variable credit.  
Independent study.

**603 Seminar in Peace Science**

Fall. 4 credits.  
Among topics to be covered at an advanced level are game theory, coalition theory, bargaining and negotiation processes, cooperative procedures, microbehavior models, macrosocial processes, and general systems analysis.

**605 Advanced Social Theory for Peace Scientists**

Spring. 4 credits. Prerequisites: Economics 505 and knowledge of microeconomic theory. Study of diverse social science hypotheses and theories as they relate to, and can be synthesized within, multiregional, multinational, and generally multigroup conflict and cooperative frameworks. Particular attention will be given to developments stemming from microeconomics and general systems theory. Dynamic analyses will be emphasized.

**610 Stochastic Economics: Concepts and Techniques**

Spring. 4 credits. Prerequisites: Economics 509, 510, 513, 514, 519, and 520. This course will review a number of techniques that have been useful in developing stochastic models of economic behavior. Among these are (a) discrete-time Markov processes, (b) dynamic programming under uncertainty, and (c) continuous-time diffusion processes. Examples of economic models will be drawn from recent literature on optimal capital accumulation and optimal savings and portfolio selection problems; permanent income hypothesis; dynamic models of price adjustment, etc. Advanced graduate students contemplating work in economic theory and econometric theory will be able to get some exposure to current research.

**611 Advanced Microeconomic Theory**

Fall. 4 credits.



**612 Advanced Macroeconomic Theory**  
Fall. 4 credits.

**617 Mathematical Economics**  
Spring. 4 credits.

**618 Mathematical Economics**  
Fall. 4 credits.

**619 Advanced Topics in Econometrics I**  
Fall. 4 credits. Prerequisites: Economics 519–520 or permission of instructor.  
Advanced topics in econometrics, such as asymptotic estimation and test theory, robust estimation, Bayesian inference, advanced topics in time-series analysis, errors in variable and latent variable models, qualitative and limited dependent variables, aggregation, panel data, and duration models.

**620 Advanced Topics in Econometrics II**  
Spring. 4 credits. Prerequisites: Economics 519–520 or permission of instructor.  
For description see Economics 619.

**623 American Economic History**  
Fall or spring. 4 credits.

**624 American Economic History**  
Fall or spring. 4 credits.

**626 Methods in Economic History**  
Fall or spring. 4 credits.

**631 Monetary Theory and Policy**  
Fall. 4 credits.

**632 Monetary Theory and Policy**  
Spring. 4 credits.

**635 Public Finance: Resource Allocation and Fiscal Policy**  
Fall. 4 credits.

**636 Public Finance: Resource Allocation and Fiscal Policy**  
Spring. 4 credits.

**637 Location Theory and Regional Analysis**  
Fall. 4 credits. Prerequisites: Economics 509 and 517 and Econometrics.  
Economic principles influencing the location of economic activity, its spatial equilibrium structure, and dynamic forces. Topics include spatial pricing policies, price competition, and relocation by firms; residential location patterns; patterns of regional growth and decline; and patterns of urbanization.

**638 Public Finance: Local Government and Urban Structure**  
Fall or spring. 4 credits.  
An integration of urban economics and location theory with local public goods and state and local public finance topics. Both equilibrium models and dynamic analyses are explored.

**641 Seminar in Labor Economics**  
Fall. 4 credits.

**642 Seminar in Labor Economics**  
Spring. 4 credits.

**644 The Labor Market and Public Policy: A Comparative View**  
Fall or spring. 4 credits.

**647 Economics of Evaluation (also Industrial and Labor Relations 647)**  
Spring. 4 credits.  
For description see Industrial and Labor Relations 647.

**648 Issues in Latin America**  
Fall or spring. 4 credits.

**651 Industrial Organization and Regulation**  
Fall. 4 credits.

**652 Industrial Organization and Regulation**  
Spring. 4 credits.

**653 Public Policy Issues for Industrial Organizations**  
Spring. 4 credits. Prerequisites: Economics 509, 510, and 651.  
The course takes an in-depth view of the interaction between the government and business. Methods of business control, including antitrust, price regulation, entry regulation, and safety regulation. Emphasis will be not only on the economic effects on business, but on the economics of selecting and evolving the method of control.

**655 Rivalry and Cooperation**  
Fall. 4 credits. Prerequisites: Economics Graduate Core or instructor's permission.  
In standard models, economic interaction is impersonal. Agents respond to price signals and measure their own welfare not in relative but in absolute terms; and cooperative behavior emerges only when it coincides with narrow self-interest. This course will explore the details of rivalry and cooperation in an effort to synthesize broader views of economic interaction. Topics will include the effect of concerns about relative income on wage rates, consumption, savings, and regulation; the effect of concerns about fairness on prices and wages; the conditions that foster trust and cooperation; and the role of positional competition in the distribution of economic rewards.

**661 International Economics: Pure Theory and Policy**  
Fall. 4 credits.

**662 Seminar in International Economics**  
Spring. 4 credits. Prerequisites: Economics 661, acquaintance with conventional trade analysis, or permission of instructor.  
The course will cover advanced topics in international economics normally covered in International Economics 661.

**664 International Economics: Balance of Payments and International Finance**  
Fall or spring. 4 credits.

**670 Economic Demography and Development**  
Fall or spring. 4 credits.

**671 Economics of Development**  
Spring. 4 credits.

**672 Economics of Development**  
Fall. 4 credits. Prerequisites: first-year graduate economic theory and econometrics.  
Analytical approaches to the economic problems of developing nations. Topics to be covered include: some old and new directions in development economics thinking, the welfare economics of poverty and inequality, empirical evidence on who benefits from economic development, labor market models, project analysis with application to the economics of education, and development policy.

**673 Economic Development**  
Fall or spring. 4 credits. Prerequisites: Economics 509 and 520.

The course is concerned with theoretical and applied works that seek to explain economic development, or lack thereof, in countries at low-income levels. Specific topics vary each semester.

**674 Economic Systems**  
Spring. 4 credits.

**675 Comparative Economic Organization and Institutions**  
Fall. 4 credits. Prerequisites: Economics 314 and 351–352 or equivalent.  
This course addresses problems of coordination, management, finance, and organizational structure in firms and, to some extent, economies. It covers topics such as coordination mechanisms for production activity, problems arising in the control of subordinate agents' behavior, decision making within firms, internal firm organization, financial institutions and loan contracts, and the market for firm control. Course material draws from literature on mechanism design and from the fields of industrial organization, finance, and comparative systems.

**678 Economic Growth in Southeast Asia**  
Fall or spring. 4 credits.

**679 Theory of Quantitative Economic Policy**  
Fall or spring. 4 credits.

**681 Economics of Participation and Self-Management**  
Fall. 4 credits. Prerequisites: Economics 101–102, or permission of instructor.  
For description see Economics 381. Economics 681 is given on a more advanced graduate level.

**682 Seminar on Economics of Participation and Labor-managed Systems**  
Fall. 4 credits.

**684 Seminars in Advanced Economics**  
Fall and spring. 4 credits.

## ENGLISH

W. Wetherbee, chair; D. Fried, director of undergraduate studies (255-3492); M. Jacobus, graduate faculty representative (255-6800); E. Rosenberg, director of honors program; B. B. Adams, A. R. Ammons, J. P. Bishop, J. F. Blackall, A. Boehm, F. V. Bogel, L. Bogel, L. Brown, A. Caputi, C. Chase, B. Correll, J. Culler, S. Davis, D. D. Eddy, L. Fakundiny, R. T. Farrell, R. Gilbert, K. Gottschalk, L. Herrin, T. D. Hill, M. Hite, P. Janowitz, B. Jeyifo, N. Kaplan, C. V. Kaske, M. Koch, C. S. Levy, A. Lurie, D. E. McCall, K. A. McClane, J. R. McConkey, M. McCoy, H. S. McMillin, P. Marcus, D. Mermin, S. P. Mohanty, R. Morgan, H. Mullen, T. Murray, R. Parker, S. Parrish, J. Porte, N. Saccamano, S. Samuels, P. Sawyer, D. R. Schwarz, M. Seltzer, H. E. Shaw, S. Siegel, W. J. Slatoff, H. Spillers, G. Teskey, S. Vaughn. Emeriti: M. H. Abrams, S. Elledge, R. Elias, E. G. Fogel, M. A. Radzinowicz, W. J. Slatoff, S. C. Strout

The Department of English offers a wide range of courses in English, American, and Anglophone literature as well as in creative writing, expository writing, and film. Literature courses focus variously on the close reading of texts, the study of particular authors and genres, questions of critical theory and method, and the relationship of literary works to their historical periods and to other disciplines. The department seeks not only to foster analytical reading and lucid writing but also, through the study of literary texts, to teach students to think about the nature and value of human experience.

Students who major in English develop their own programs of study in consultation with their advisers. Some focus on a particular historical period or literary genre. Others pursue special interests in such areas as women's literature, Afro-American literature, or creative writing.

### The Major

Any student considering a major in English should meet with the department's director of undergraduate studies to discuss the major and be assigned a major adviser. Copies of a brochure containing suggestions for English majors and prospective English majors are available in the department office, 250 Goldwin Smith Hall.

The Department of English recommends that its students ready themselves for the major by taking at least one preparatory course. Freshmen interested in majoring in English are encouraged to take one of the following freshman seminars: The Reading of Fiction (English 270), The Reading of Poetry (English 271), or Introduction to Drama (English 272). First-term freshmen with a score of 700 or above on the CEEB College Placement Tests in English composition or literature or 4 or 5 on the CEEB Advanced Placement Examination in English may enroll in English 270, 271, 272 as space permits (all students who have taken one freshman seminar are permitted to enroll in these courses as space permits).

English 201 and 202, a survey of major British writers, though not required for the major, are strongly recommended for majors and prospective majors, since they afford an overview of the history of English literature, providing an introduction to periods, authors, and genres that allows students to make a more informed choice of advanced courses.

In addition, The American Literary Tradition (English 275), Close Reading (English 204), and Creative Writing (English 280 or 281) are especially suitable in preparation for the major.

### Requirements

Each English major must complete with passing letter grades at least 36 credits in courses approved for the major. Students may count up to four courses for the major from the category entitled "200-level Courses Approved for the Major." All English courses numbered 300 or above count toward the major. Of the 36 credits required for the major, 12 (three courses) must be taken in literature before 1800. (Courses taken for the English major may also be used to satisfy the arts college humanities distribution requirement or, in the case of creative writing courses, the expressive arts distribution requirement.)

English majors also are required to complete six credits of foreign language study (preferably in literature) in courses for which qualification is a prerequisite. Advanced placement credit does not fulfill this requirement, nor does the study of foreign literature in translation. Majors are urged to complete this requirement by the end of their sophomore year, and those who enter Cornell without sufficient preparation should begin their language study at once.

Students may count toward the English major a maximum of 12 credits in literature and creative writing courses at the 300 level or above given by such departments and programs as Comparative Literature, Theatre Arts, foreign languages, the Africana Studies and Research Center, and the Society for the Humanities. Double majors may count toward these 12 credits any courses, 300 level or above, taken in their other major if such courses are approved by their English department adviser as relevant to the study of literature.

**Honors.** Prospective candidates for the degree of Bachelor of Arts with honors in English should read the handout "English Department Honors Program," available in the English office. These students should discuss their qualifications with the chair of the Honors Committee during the spring term of their sophomore year, when they will be admitted provisionally to the program. During their junior year, honors candidates must take one honors seminar (English 491 or 492), which will reflect a dominant area of interest, address methods of scholarly research, and require the composition of a long end-of-term essay. Honors students are strongly encouraged to take an additional 400-level course in the field in which they plan to concentrate. On the basis of their performance, students will be officially admitted to the program at the end of the junior year. Seniors in honors enroll in a year-long tutorial (English 493 and 494) in which they work closely with a faculty member especially qualified to supervise the topic of the candidate's choosing; the year's work culminates in the writing of a scholarly honors thesis. (All seniors in the program are expected to attend informal sessions in which they discuss their work-in-progress.) More information about the program may be found in the department's brochure for honors candidates.

### Courses for Nonmajors

For students not majoring in English, the department makes available a variety of courses at all levels. Some courses at the 200 level are open to qualified freshmen, and all of them are open to sophomores. Courses at the 300 level are open to juniors and seniors and to underclass students with permission of the instructor. The suitability of courses at the 400 level for nonmajors will vary from topic to topic, and permission of the instructor is required.

### Freshman Seminars

As part of the Freshman Writing Seminar Program, the Department of English offers many one-semester courses concerned with various forms of writing (narrative, biographical, expository), with the study of specific areas in English and American literature, and with the relation of literature to culture. Students may elect any two of these courses during their first year to satisfy the Freshman Seminar requirement. Descriptions of Freshman Writing Seminar offerings may be found in the Freshman Seminar Program listings, available from college registrars in August for the fall term and in November for the spring term.

Especially well-qualified students who are considering a major in English are encouraged to enroll in English 270, 271, or 272.

Students who have scored 4 or 5 on the Princeton exam or 700 or better on the English Composition or CEEB test are eligible to enroll in the fall semester (space permitting) in any one of these courses. English 270, 271, and 272 will be open to all freshmen in the spring semester who have satisfactorily completed one freshman seminar. Registration is handled by the Freshman Writing Seminar Program during freshman registration.

#### 270 The Reading of Fiction

Fall, spring, each summer. 3 credits. Each section limited to 17 students. Freshman Seminar. Recommended for prospective majors in English.

Forms of modern fiction, with emphasis on the short story and novella. Critical study of works by English, American, and Continental writers from 1880 to the present.

#### 271 The Reading of Poetry

Fall, spring. 3 credits. Each section limited to 17 students. Freshman Seminar. Recommended for prospective majors in English. Designed to sharpen the student's ability to understand and respond to poetry, readings in the major periods, modes, and genres of poetry written in English.

#### 272 Introduction to Drama

Fall, spring. 3 credits. Each section limited to 17 students. Freshman Seminar. Recommended for prospective majors in English. Selected works by such playwrights as Sophocles, Shakespeare, Ibsen, and Brecht introduce the chief idioms and styles of drama. The course work will consist of discussions and papers and may include a special project related to the plays being produced by the Department of Theatre Arts.

### Courses for Sophomores

Although courses numbered in the 200s are primarily for sophomores, some of them are open to qualified freshmen and to upperclass students. Students may count up to four 200-level courses toward the major from

"Courses Approved for the Major" listed below, as well as all courses numbered 300 or above.

## Courses Recommended for Prospective Majors

### 275 The American Literary Tradition

Fall, spring. 3 credits. Recommended for prospective majors in American studies. This is not a Freshman Seminar.

Fall: M W F 1:25–2:15. R. Gilbert.

Spring: M W F 12:20–1:10. J. Bishop.

A sequence of prominent texts from the early nineteenth through the late twentieth century, chosen to exhibit what has been accomplished in fiction, long or short, autobiography, and poetry by some American writers, male and female, black and white. A representative syllabus might include such names as Hawthorne, Whitman, Douglass, Melville, Alcott, James, Hemingway, Salinger, and Morrison.

### 280–281 Creative Writing

Fall, spring, summer, and winter session. 3 credits. Limited to 18 students each section. Please note the following registration procedure for Creative Writing 280–281: (Fall and spring) enrollment is by ballot only. Students interested in Creative Writing must come to the Grand Course Exchange to fill out a ballot. No pre-registration for 280–281 will be accepted. Further details will be available in registration packets and at the Grand Course Exchange.

Recommended for prospective English majors. An introductory course in the theory and practice of writing narrative prose, poetry, and allied forms. English 280 is not a prerequisite for English 281.

## Courses Primarily For Nonmajors

### 205–206 Readings in English and American Literature

206, fall; 205, spring. 3 credits each term. Open to all undergraduates. English 205 is not a prerequisite for 206.

206: Fall, M W F 10:10–11:00. S. Parrish.

206. Covers literature since the mid-nineteenth century. Novels by such authors as Emily Bronte, Conrad, Hardy, Hemingway, Faulkner, Vonnegut, and others; poems by Browning, Housman, and Frost; plays by Shaw; and one or two contemporary writers such as Arthur Miller. Two lectures and one discussion section each week. Two short papers, two prelims, no final examination.

205: Spring, M W F 11:15–12:05.

R. Farrell.

205. An introduction to some of the major texts from the beginning of the literature through the eighteenth century. The first weeks will be devoted to *Beowulf* and two selections from Chaucer's *Canterbury Tales* as samples of early yet readily understood literature. Readings from other authors include Shakespeare, Jonson, Marlowe, Donne, Pope, Swift, and Johnson.

### [208 Forms of Poetry

3 credits. Not offered 1990–91.]

### [210 Medieval Romance: The Voyage to the Otherworld

3 credits. Not offered 1990–91.]

### 227 Shakespeare

Fall, spring, summer. 3 credits. Each section limited to 25 students.

Fall: Section 1: T R 10:10–11:25,

R. Parker; Section 2: T R 10:10–11:25,

D. Eddy. Spring: M W F 1:25–2:15.

C. Levy.

A critical study of representative plays from the principal periods of Shakespeare's career.

### 263 Forms of Hollywood Comedy: The 1930s and 1940s

Fall. 3 credits. Enrollment limited to 20 students.

T R 11:40–12:55. L. Bogel.

This seminar will focus on American film comedies in their relation to the historical moments that produced them and to the Hollywood production system. We will discuss comedy's social functions, its structures, its visual styles. The 1930s brought the end of silent slapstick or vaudeville comedies that relied heavily on physical humor, though artists like Charlie Chaplin (in *Modern Times*) continued these older traditions, while the Marx brothers transformed them into sound films like *A Day at the Races* and *Duck Soup*. With screwball comedy, a strong verbal and domestic tradition emerged in the 1930s. We will consider such films as *It Happened One Night*, *My Man Godfrey*, *Bringing Up Baby*, *His Girl Friday*, and *The Philadelphia Story*, for the ways they negotiated issues of class and gender, as well as for the ways they participated in Hollywood's star system. We will concentrate as well on satiric comedies by Preston Sturges (*Sullivan's Travels* and *The Lady Eve*) and Ernest Lubitsch (*Ninotchka* and *To Be or Not to Be*). There will be regularly scheduled, required screenings and video viewings of about fifteen films, outside class meeting hours. Students enrolling for the course will have to be free to attend these screenings, on alternate Mondays at 4:00 p.m. and Thursdays at 6:30 p.m. Students can anticipate writing viewing exercises for most films and three essays. Lab fee.

### 283 Writing for Readers—Reading for Writers (also Writing 283)

Spring. 3 credits. Limited to 17 students.

Prerequisite: permission of the instructor.

T R 10:10–11:25. J. Martin.

This course will develop students' writing abilities by teaching them to become skilled readers of their own work as well as that of others. By studying our own preconceptions about writing and through readings on language and rhetoric, we will work to develop a critical vocabulary for evaluating writing, focusing on such issues as the role of audience, patterns of organization, the varieties of language, and the recognition and manipulation of styles. The class will focus on how writers can respond to the work of others through informed evaluations and criticisms and on how writers can learn from the evaluations of their readers. In considering how a reader can help direct and influence subsequent drafts of an essay, the writer learns to strengthen writing skills by rewriting in response to the reader's critical evaluation. In classes, in editing groups, and in written responses, students will evaluate their own work and that of others to develop effective writing and revising strategies. Students will write and revise at least eight essays during the semester. Qualified students may have the opportunity to continue the practice of reading and responding by becoming tutors in the Writing Workshop's Walk-In Service.

### 285 Art, Isotopes, and Analysis (also MS&E 285)

Spring. 3 credits.

M W F 11:15–12:05. D. Eddy.

The analysis of paintings and rare books and the physical concepts underlying modern analytical techniques. Each week a work of art will be discussed, focusing on the historical and technical aspects of its creation and modern analysis of it. Visual, infra-red, and x-ray examinations provide insight into the physical properties. Pigments are identified by the radiation emitted in electronic transitions. The ratio of isotopes can be used to identify the geographical origin of a particular pigment as well as being used as a dating method. Examples will be given of authentication and conservation.

### 286 Writing in the Humanities (also Writing 201)

Fall or spring. 3 credits. Limited to 17 students.

Registrants must have completed freshman writing requirements. S-U grades with permission of instructor. Carries distribution credit as English 286.

Fall: T R 11:40–12:55. S. Davis.

Spring: T R 11:40–12:55. S. Davis.

Writing 201/English 286 helps students strengthen reading and writing skills valuable in all disciplines and particularly appropriate to the humanities. It also encourages them to reflect on what they do when they interpret and write about works of literature, philosophy, and visual art. Just what happens when we "read" such works—and what do we mean when we claim to understand them? What audience do our interpretations address, and how can we convey them in writing that is engaging and forceful? How are conflicts of interpretation resolved? How do historical knowledge and theory affect our interpretations? What kinds of knowledge and self-awareness does study in the humanities yield?

Works studied in the course challenge our understanding by their strangeness or their uncanny familiarity. They show Western reason in conflict with its real or supposed opposites—alien humanity, artistic inspiration, illusion, madness, the divine, and the will to power. Readings/viewings may include paintings by da Vinci and Velasquez; novels by Nabokov, Conrad, and Achebe; parables by Maxine Hong Kingston, Kafka, and Jesus; Plato's *Gorgias* or *Phaedrus*; Nietzsche's *Birth of Tragedy*; and Euripides' *The Bacchae*.

Students in the course write (and often rewrite) 40 pages of papers and confer frequently with the instructor.

### 288–289 Expository Writing

288, fall; 289, spring. 3 credits each term. Each section limited to 16 students.

Hours to be arranged. N. Kaplan and staff.

This course offers guidance and an audience for undergraduates who wish to gain skill in a variety of forms of expository writing. Students write personal, argumentative, and investigative essays on topics related to their interests, reading examples of published work in these forms and frequently reviewing each other's writing in large or small group meetings. A substantial amount of new writing or a revision of an earlier essay will be expected each week. Since the class is the primary audience for student writing, regular attendance and participation are required. Instructors and students hold regular individual conferences.

## 200-Level Courses Approved for the Major

Students may take up to four of the following 200-level courses for credit toward the English major.

**201-202 The English Literary Tradition**  
Fall and spring. 4 credits. Open to all undergraduates. English 201 is not a prerequisite for 202.

201: Fall. M W F 11:15-12:05. B. Correll.  
Interpretation of major works ranging from Beowulf through Milton. Surveys Old English poetry, Chaucer, medieval romances, Spenser, Shakespeare, Renaissance lyric poetry, and Milton.

202: Spring. M W F 11:15-12:05. P. Sawyer, F. Bogel.  
Includes Dryden, Swift, Pope, Johnson, Blake, the major Romantic and Victorian poets, and Yeats. The course will be conducted by a combination of lectures and seminars.

### 204 Close Reading: An Intensive Introduction

Spring. 4 credits. Limited to 20 students per section.

Section 1: T R 11:40-12:55. F. Bogel.  
Section 2: M W F 9:05-9:55. J. Bishop.  
This course is designed to introduce students to the ways language operates in written texts and to the various acts we perform when we read those texts. Its aim is to prepare students for advanced work in literary studies and for a more imaginative relation to their entire verbal environment.

The course will explore poems, plays, stories, and nonfictional prose, along with a variety of everyday writings: advertisements, billboards, political slogans, bumper stickers, sweatshirts, and more.

We will explore such questions as: How do literary critics interpret texts, and how do their interpretations differ from other kinds of reading? Is literary criticism appropriate to all sorts of text, or just those designated as "literature"? Can the same text be literature at some times but not at others? Do readers create or discover the meanings of texts, and how can we distinguish between legitimate and illegitimate—or convincing and unconvincing—interpretations?

Writing assignments will be exploratory, focusing on details of the language of texts and taking forms other than that of the standard critical essay. Class will be conducted as a discussion.

### [247 Major Nineteenth-Century Women Novelists

4 credits. Not offered 1990-91.]

### [251 Twentieth-Century Women Novelists

4 credits. Not offered 1990-91.]

### 253 The Modern Novel

Fall. 4 credits.

M W F 12:20-1:10. S. P. Mohanty.  
A survey of the modern novel, with some attention to its social and cultural context. We shall read novels and shorter fiction by such writers as Arnold Bennett, Conrad, Joyce, and Woolf, as well as more contemporary works by Toni Morrison and Salman Rushdie.

### 255 African Literature

Fall. 4 credits.

T R 10:10-11:25. B. Jeyifo.

An introduction to major African writers and literary traditions. Authors studied may include Achebe, Soyinka, Clark, Armah, Ngugi, and Amercheta.

### 262 Asian American Literature

Spring. 3 credits.

T R 1:25-2:40. Staff.

This course explores the diverse worlds of past and present Asian America through critical reading of selected works by Asian American writers. Emphasis is on helping students locate and develop their own points of view with regard to America as a pluralistic society with a diverse and evolving literary heritage. Topics covered include the oral tradition; the creative process for Asian American writers; incarceration and resistance; generation, gender, and community; and diversity and evolution. Students will keep a reading journal with entries focusing on connections among what is read, class discussion, and perceptions of life.

### 264 Ethnic Literature: Bridges and Boundaries

Spring. 4 credits.

T R 1:25-2:40. H. Mullen.

The American language that, William Carlos Williams noted, came "from the mouths of Polish mothers" has also been shaped by the oral and written traditions of Native Americans, Afro-Americans, Chicanos, and Asian Americans whose literary production will be examined in this course. Works by writers in these traditions will be studied as sites marking the emergence of a contemporary American language and literature capable of representing the diverse and particular realities of a multicultural nation. This course will focus especially on how each ethnic tradition uses the contested territories of geography, language, and gender in texts that both refer to and imaginatively construct communities and traditions based on collective experience. Discussion will focus on how each text makes connections and distinctions between individuals as well as within and among communities bound together by shared linguistic, geographical, and cultural traditions.

### [265 The Afro-American Folk Tradition in American Literature (also Africana Studies 265)

3 credits. Not offered 1990-91.]

### 268 The Culture of the 1960s

Spring. 4 credits.

M W F 1:25-2:15. P. Sawyer.

The 1960s survive today as a quasi-mythical period and as an ongoing debate. Was it a time of dangerous experimentation with drugs, sex, and alternative "lifestyles" on the part of a pampered generation that gradually learned to straighten up and join the mainstream? Or was it a time of revolutionary hopefulness, when the Civil Rights movement and the Vietnam War stimulated a passionate critique of the racist and imperialist structures of American society? The course addresses these and other questions about that turbulent decade through a reading of novels, poems, plays, films, journalism, and historical works. Throughout, we will be attentive to ways the 1960s have been converted into nostalgia and otherwise revised by the media. Texts will be drawn from *Catch-22*, *The Autobiography of Malcolm X*, *The Port Huron Statement*, *The Feminine Mystique*, *The Armies of the Night*, poetry by Sylvia Plath and Robert Lowell; the art of Andy

Warhol; the songs of Bob Dylan; and films such as *Dr. Strangelove*, *Hearts and Minds*, and *The Big Chill*.

### 290 Literature and Value

Spring. 4 credits.

T R 2:55-4:10. J. McConkey.

Each week a different member of the faculty discusses a poem, group of poems, story, play, or novel that is of particular importance to him or her, perhaps as a work that contributed to the person's decision to devote a lifetime to the study of literature or to the writing of fiction or verse, perhaps as a work that has affinity with present-day concerns. In following meetings that week, class members will discuss in detail the same or related works. Students will be encouraged to explore, in their papers for the course as well as in their discussions, the relationships between specific texts and their own experience, attitudes, and values.

## Courses for Sophomores, Juniors, and Seniors

Courses at the 300 level are open to juniors and seniors and to others with the permission of the instructor. There are no specific prerequisites except as noted for English 382-383 and 384-385.

### 302 Literature and Theory (also English 702 and Comparative Literature 702)

Fall. 4 credits.

M W 10:10-11:00 and discussion section on Friday (time to be arranged). J. Culler.  
Study of issues in contemporary theoretical debates, with particular attention to structuralism, deconstruction, psychoanalysis, and feminism. Readings by Barthes, Derrida, Foucault, B. Johnson, J. Rose, and others. No previous knowledge of literary theory is assumed.

### [310 Old English Literature in Translation

4 credits. Not offered 1990-91.]

### 319 Chaucer

Fall. 4 credits.

M W F 11:15-12:05. R. Farrell.

The course will center on a close reading of the major stories from the *Canterbury Tales*, *Troilus and Criseyde*, and some of the minor works. Students will be given ample opportunity to learn Chaucer's language, so that all dimensions of the poems will be available to them. Prior knowledge of Middle English is neither expected nor required; course participants will be encouraged to follow up their own interests in class reports and papers.

### [320 The Sixteenth Century—Tudor Culture

4 credits. Not offered 1990-91.]

### [321 Spenser and Malory

4 credits. Not offered 1990-91.]

### [322 The Seventeenth Century

4 credits. Not offered 1990-91.]

### 325 The Culture of the Later Renaissance (also Comparative Literature 362, and History 364)

Spring. 4 credits.

T R 10:10-11:00. C. Kaske.

Members of various departments will lecture on Luther, Michelangelo, Montaigne, Edmund Spenser, Monteverdi, Cervantes, Copernicus, and Galileo. Guest lecturers will include R. Harris-Warrick, music; Peter Dear, history; and C. Arroyo, romance studies. Lectures and



discussion will introduce different methods of interpretation and of historical analysis.

Written requirements: two short papers and a final examination.

### 327 Shakespeare

Fall. 4 credits.

M W F 9:05–9:55. B. Adams.

An introduction to the works of Shakespeare based on a selection of major plays and sonnets designed to illustrate the range of his artistic achievement. Plays to be examined include *Romeo and Juliet*, *Hamlet*, *Othello*, *King Lear*, *Macbeth*, *As You Like It*, *The Taming of the Shrew*, *The Merchant of Venice*, *Richard II*, *Richard III*, *The Winter's Tale*, and *The Tempest*. Regularly scheduled showings of videotape productions of plays treated in lectures.

### [329 Milton

4 credits. Not offered 1990–91.]

### 330 Restoration and Eighteenth-Century Literature

Fall. 4 credits.

T R 11:40–12:55. F. Bogel.

This course will explore the canonical writers of the age through an examination of the first major era of English imperialism, juxtaposing texts by Dryden, Behn, Defoe, Swift, and others with contemporary documents and comments on trade, exploration, and colonialism in Africa and the New World. The main theme of the course will include a definition of the structure and function of imperialist ideology; its connection with matters of literary form including the decline of drama, the development of the novel, and the rise of the novel of sentiment; its relevance to issues of racism and abolitionism; and its relation to the representation of women.

### 333 The Eighteenth-Century English Novel

Spring. 4 credits.

M W F 1:25–2:15. N. Saccamano.

The rise of the English novel. We will place the emergence of the novel as a dominant literary genre in the context of other intellectual and cultural developments in eighteenth-century England and will discuss what the novel's changing form can tell us about the nature of fiction and the problems of representation. Novels by Defoe, Richardson, Fielding, Smollett, Sterne.

### 336 American Drama and Theatre (also Theatre Arts 336)

Spring. 4 credits. Limited to 15.

T R 1:25–2:40. E. Gainor.

Major dramatists of the contemporary American theatre.

### 340 The English Romantic Period

Fall. 4 credits.

M W F 11:15–12:05. S. Parrish.

Readings in the major poets—Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats—along with a few related letters and critical essays. By the end of the readings we will try to arrive at an understanding of what we call the “romantic revolution.”

### [345 The Victorian Period

4 credits. Not offered 1990–91.]

### 348 The Female Literary Tradition: Wollstonecraft to Woolf (also Women's Studies 348)

Spring. 4 credits.

T R 1:25–2:40. M. Jacobus.

A course designed to survey and investigate the nature of a British “female literary tradition” from the late eighteenth century to the early twentieth century, read in the light of the rich and varied feminist criticism it has attracted (questions: what might constitute a female literary tradition? How is it transmitted? forgotten? recovered? defined as “female” in the first place?). Starting with late eighteenth-century women novelists such as Inchbald, Burney, and Radcliffe, we will move by way of Wollstonecraft's writing to Austen, Edgeworth, and Mary Shelley. Mid-nineteenth-century authors will include writing by the Brontës, Gaskell, Barrett Browning, and George Eliot, as well as sensation novelists such as Braddon and Wood. We will look at some of the “new women” authors of the 1890s (Egerton, Schreiner) before turning to early twentieth-century novelists including Woolf, Radcliffe Hall, and H.D. The dual emphasis will be on an atypical or non-canonical selection of authors and texts where possible, and on feminist literary criticism; a valuable (although not essential) prerequisite might be a 200- or 300-level course in major women novelists of the period covered, such as Austen, the Brontës, or Eliot, or in feminist literary theory.

### 350 The Early Twentieth Century (to 1930)

Fall. 4 credits.

T R 10:10–11:25. D. Schwarz.

Critical study of major works by Hardy, Conrad, Lawrence, Joyce, Woolf, Eliot, Yeats, Hopkins, Wilde, and others. While the emphasis will be on close reading of individual works, some attempt will be made to place the authors and works within the context of literary and intellectual history. The course will seek to define the development of literary modernism (mostly but not exclusively in England), and relate literary modernism to other intellectual developments, including those in painting and sculpture.

### [351 Modern Literature since 1914

4 credits. Not offered 1990–91.]

### [353 Post-Colonial Literature

4 credits. Not offered 1990–91.]

### 356 Postmodernist Fiction

Spring. 4 credits.

T R 10:10–11:25. M. Hite.

Experimental fiction written in the post-1960 period, ranging from the encyclopedic (Pynchon's *V*, Lessing's *The Golden Notebook*, Rushdie's *The Satanic Verses*) to the gnomic (short stories by Barth, Barthelme, and Coover), and taking in along the way Atwood's *Lady Oracle*, Nabokov's *Pale Fire*, and Russ's *The Female Man*. The class will be particularly concerned with ways in which these fictions address the conventions of realism and modernism, with the strategies of reading that they elicit—or seem to elicit—and with questions of canonicity and gender.

### 361 Early American Literature

Fall. 4 credits.

T R 1:25–2:40. J. Porte.

American writing from the 1630s to the 1830s, including prose and poetry of the Puritans, Edwards, Franklin, Crèvecoeur, Brockden Brown, Irving, Bryant, and Cooper and the early work of Poe, Hawthorne, and Emerson.

### 362 The American Renaissance

Spring. 4 credits.

M W F 11:15–12:05. J. Porte.

The major literary achievements of Emerson, Thoreau, Hawthorne, Melville, Whitman, and Dickinson. Other texts, and especially works of women and Afro-American authors, will be read in relation to the dominant texts of the American Renaissance.

### [363 The Age of Realism and Naturalism

4 credits. Not offered 1990–91.]

### [364 American Literature between the Wars

4 credits. Not offered 1990–91.]

### 365 American Literature since 1945

Fall. 4 credits.

M W F 2:30–3:20. L. Herrin.

This course will alternate with English 364, which surveys American literature between the two world wars. Most of the writers we will study still live and write and change. Consequently, the verdict will not be in. Fiction writers will most likely include Bellow, Nabokov, Barth, Ellison, Wright Morris, John Hawkes, Toni Morrison, and Donald Barthelme. From an anthology of contemporary American poetry we will read Robert Lowell, A. R. Ammons, Sylvia Plath, Gary Snyder, Theodore Roethke, and others. If we have time we will look at the personally engaged journalism of Norman Mailer and Joan Didion. Writers will be chosen who will give us as keen and varied and provocative a view of ourselves as possible.

### 366 The Nineteenth-Century American Novel (formerly The Earlier American Novel)

Fall. 4 credits.

M W F 1:25–2:15. D. McCall.

Hawthorne, Melville, James, and Mark Twain.

### 367 The Modern American Novel

Spring. 4 Credits.

M W F 10:10–11:00. D. Fried.

Close study of selected novels and some short stories, 1920–1945. Focus will be on such writers as Wharton, Cather, Fitzgerald, Hemingway, and Hurston, with some attention to the detective fiction of Chandler and Cain, and to the material culture of the period, including photography, movies, urban design, and the New York World's Fair of 1939/40.

### [368 The Contemporary American Novel

4 credits. Not offered 1990–91.]

### 370 The Nineteenth-Century English Novel

Fall. 4 credits.

M W F 1:25–2:15. H. Shaw.

A study of representative works by major English novelists from Austen to Hardy. The course will view these works from a number of different perspectives, focusing on the individual texts as well as on the question of what is involved in reading them (or any other novels). The reading list will include Austen, *Pride and Prejudice*, Thackeray, *Vanity Fair*, Bronte, *Wuthering Heights*, Dickens, *Bleak House*, Eliot, *Middlemarch*, and Hardy, *Jude the Obscure*.

### [371 American Poetry from Emerson to Stevens

4 credits. Not offered 1990–91.]

**372 English Drama**

Spring. 4 credits.

T R 10:10–11:25. S. McMillin.

Major events in the English theater from the Middle Ages to the beginning of the twentieth century. Plays by the Wakefield master, Marlowe, Shakespeare, Jonson, Dryden, Wycherley, Congreve, Sheridan, Shelley, Shaw, and others. Dramatic texts, theatrical conventions, social conditions, and their interrelationships.

**376 Afro-American Literature**

Spring. 4 credits.

M W F 12:20–1:10. Staff.

A study of representative works of Afro-American writers. The course will cover the broadest range of periods, genres, and styles.

**Creative and Expository Writing.****381 Reading as Writing**

Fall. 4 credits. Limited to 15 students by permission of the instructor on the basis of writing samples (prose) submitted in advance, preferably during preregistration.

T R 1:25–2:40. L. Fakundiny.

A course in writing about texts from a range of genres including, but not necessarily limited to, the epic, the satire, the novel; for English majors or nonmajors who have enjoyed and done well in such courses as English 270–272, 286, 288–289, 388–389 (as well as courses in English, American, and other literatures), and who have an interest in the processes by which our solitary experiences as readers evolve into written commentary accessible to the understanding and judgment of others. The course emphasizes close reading as the initial stage of an interpretive continuum that culminates in essays about individual texts. Students should be prepared to read a small group of works attentively and repeatedly, to present their readings to the class both orally and in writing and, by means of these activities, to develop a portfolio of well-crafted prose for final submission at the end of term.

**382–383 Narrative Writing**

Fall, 382; spring, 383. 4 credits each term. Each section limited to 15 students. Students are encouraged to take English 280–281 previously. Prerequisite: permission of instructor, normally on the basis of a manuscript.

382 Fall: M W 2:30–3:20, S. Vaughn;

M W 1:25–2:15, M. McCoy;

M W 11:15–12:05, D. McCall; plus conferences to be arranged. 383

Spring: M W 11:15–12:05, M. McCoy;

M W 12:20–1:10, L. Herrin;

T R 1:25–2:15, E. Rosenberg.

The writing of fiction; study of models; analysis of students' work.

**384–385 Verse Writing**

Fall or summer, 384; spring, 385. 4 credits each term. Each section limited to 15 students. Prerequisites: English 280 and 281 and permission of instructor.

384 Fall: T 1:25–3:20, A. Ammons;

W 2:30–4:25, R. Morgan; 385 Spring:

T 1:25–3:20, R. Morgan; W 2:30–4:25,

K. McClane.

The writing of poetry; study of models; analysis of students' poems; personal conferences.

**[387 Autobiography: Theory and Practice**  
4 credits. Not offered 1990–91.]**388–389 The Art of the Essay**

Fall, 388; spring or summer, 389. 4 credits each term. Limited to 15 students. Prerequisite: permission of instructor.

388 Fall: M W 2:30–3:20 (and conferences to be arranged). C. Levy.

Interested students should submit a writing sample to Professor Levy before the beginning of the term.

For both English majors and nonmajors who have done well in freshman writing seminars, or in such courses as English 288–289 or 286, and who desire intensive practice in writing essays. Particular, but not exclusive, emphasis on expository techniques of analysis and persuasion.

389 Spring: T R 2:55–4:10. L. Fakundiny.

Interested students should submit a writing sample to Professor Fakundiny before the beginning of the term.

For both English majors and nonmajors who have done distinguished work in freshman seminars and in such courses as English 286 or 288/289 or 280/281 and who desire intensive practice in writing the personal essay.

**Courses For Advanced Undergraduates**

Enrollment in courses at the 400 level is limited by prerequisite or permission of the instructor.

**402 Video Verité: Televised Reality, Docudrama, and the Response of Multi-Cultural Video (also Society for the Humanities 402)**

Fall. 4 credits.

T 2:30–4:25. T. Murray.

The course will study different forms of documenting everyday life on television and video. How do we draw the line between fiction and reality in the broadcast news, the television docudrama, and the video documentary? In analyzing the narrative and psychoanalytical conventions of video dramatized news, we will give special consideration to video by multi-cultural artists who probe the relation of cultural difference (race, nationality, sexuality, and class). How do multi-cultural artists profit from mixing media that have served as the technological tools of colonializing systems of representation? And how does multi-cultural experimentation with film and video contribute to the theoretical understanding of the media?

**404 History Into Fiction: Nazis and the Literary Imagination (also Comparative Literature 404 and Near Eastern Studies 404)**

Fall. 4 credits.

T R 11:40–12:55. E. Rosenberg.

The twelve years of Hitler's rule remain the most critical, "longest" years of the century. We shall read some seven or eight texts by Anglophone and Continental novelists (and a few playwrights) that explore salient features of the regime: Hitler's rise to power (e.g., Mann's "Mario and the Magician," Hughes's *Fox in the Attic*); civilian life in Nazi Germany (e.g., Isherwood's *Berlin Stories*, Brecht's *Private Life of the Maulk Race*, Grass's *Dog Years*); World War II (Böll's fiction); the Occupation (Sartre's *Flies* or Camus's *Plague*, Nabokov's "Aleppo"); the American brand (Lewis's *It Can't Happen Here*, Faulkner's "Percy Grimm"); the persecution of European Jews (Sartre's "Childhood of a Leader," selections from Julian Barnes's novel *History of the World*, Jakov Lind's *Soul of Wood*). Historical commentary; uses of documentary materials. Brief ancillary

selections by Adorno, Arendt, Sartre. Two short papers; no exam.

**405 The Politics of Contemporary Criticism**

Fall. 4 credits.

M W F 2:30–3:20. S. P. Mohanty.

Limited to 15 students. Open only to undergraduates. Prerequisite: permission of instructor. Background in literary studies will be expected, but no training in critical theory will be presumed.

An introduction to some of the major issues in contemporary criticism through an examination of the relationship between two influential movements in critical theory—hermeneutics and deconstruction. Adherents of both movements seem to agree about the fundamental opposition between their respective approaches and conclusions. We shall try to understand the issues at stake in this opposition, exploring such questions as: what is a (literary) text? What is interpretation and what are its limits? What political issues underlie particular critical strategies and methodological choices? We shall negotiate between the competing claims of each position and focus on the implications of answers to such questions in actual critical analysis. Primary readings from some of the chief exponents of the two movements, particularly Paul Ricoeur, Hans-Georg Gadamer, and Jacques Derrida. Additional readings, from a variety of critical and philosophical traditions, including such authors as Rorty, Eagleton, Felman, Foucault, and Jameson.

**[406 Archaeology of Early Christian England and Ireland**

4 credits. Not offered 1990–91.]

**409 Images of Fetishism, Narratives of Curiosity (also Society for the Humanities 409)**

Fall. 3 credits.

R 10:10–12:00. L. Mulvey.

The seminar will take the question of fetishism as its point of departure, considering the concept as a symptom both of the language of the unconscious and of the circulation of commodities. Using images and narratives from popular culture, the seminar will also place the processes of displacement and denial associated with fetishism in juxtaposition with narrative mechanisms activated by enigma and curiosity.

**410 Contemporary Film Theory (also Society for the Humanities 411)**

Fall. 3 credits.

T 11:15–1:10. C. Penley.

This course will survey the major figures and ideas that have shaped contemporary film theory: Christian Metz's semiotics of the cinema, Raymond Bellour and Thierry Kuntzel's textual analyses of film, Jean-Louis Baudry's "Apparatus" theories, Stephen Heath's work on narrative and ideology, and Laura Mulvey's feminist and psychoanalytic approach to describing spectatorship. In addition the course will cover the most important revisions and refutations of those theories by feminists, Marxists, neo-formalists, deconstructionists, cognitive theorists, cultural studies and popular culture scholars, and so on. Attention will also be given to the social and institutional forces that have shaped this relatively new and volatile discipline.

**411 Introduction to Old English (also English 611)**

Fall. 4 credits.

M W F 12:20–1:10. R. Farrell.

The aim of the course is to teach students to read Old English as accurately and fluently as possible. While the primary emphasis is on acquiring a reading knowledge of the language, we will also be concerned with the linguistic and literary problems presented by the texts we cover.

**412 Beowulf (also English 612)**

Spring. 4 credits.

M W F 12:20–1:10. R. Farrell. Prerequisite: English 411 or equivalent knowledge of Old English.

A close reading of *Beowulf*. Attention will be given to relevant linguistic and literary problems.

**414 Modernity, Femininity, Consumerism (also Society for the Humanities 414)**

Spring. 3 credits.

M 12:20–2:15. R. Bowlby.

The tradition of literary modernity is generally seen as opposed to consumerism, whether considered as an exclusive focus on materials and monetary values, or (rather differently) as a feminine capitulation of the lures of a homogeneous mass culture. This course will question the implications and the validity of that dichotomy by looking in detail at representations of the woman, the artist, the consumer culture in literary, theoretical, and popular texts by authors such as Baudelaire, Barthes, Benjamin, Freud, Friedan, Nabokov, Wilde, and Woolf.

**[415 The English Language (also English 615)]**

4 credits. Not offered 1990–91.]

**419 Bodies, Technologies, Mass Culture (also Society for the Humanities 419)**

Fall. 4 credits.

M 12:20–2:15. M. Seltzer.

The seminar proposes an interdisciplinary investigation of the relays between forms of cultural and technological production in America between 1870 and 1930. Turn-of-the-century American culture has been described alternatively as naturalist, as the culture of consumption, and as machine culture. What binds together these apparently alternative descriptions is the "discovery" that bodies and persons are things that can be made. This course will investigate the consequences—social, representations, and theoretical—of such a discovery. The focus will be on the representation of bodies and technologies in the discourse (written and visual) of the period. Some of the questions we will consider are these: How are the sieve-like categories of the body and the machine and of the natural and the cultural reconceived in this period? What are the literary, social, and formal consequences of such a reconception? How are the life process and the machine process rewritten in this period and how do literary and visual practices register such a rewriting? What do the bodies and machines of machine culture look like and what appeals and anxieties do these representations generate?

**420 Spenser and Milton**

Fall. 4 credits.

T R 10:10–11:25. C. Kaske.

Spenser's *Mutopotmos*, *Four Hymnes*, *Shepheardes Calender* "July," "October," and "November;" *Faerie Queene* I and III entire and selections from II and IV; *Letter to Raleigh*; *Mutabilitie Cantos*. Milton's *Lycidas*; references to the writing of *Paradise Lost*; selections from the *Divorce Tracts* and *Areopagitica*; and, finally, a reading of almost all of *Paradise Lost*. Lecture and informal discussion. One 8–10 page paper on each author and one final exam consisting of a choice from a wide range to topics comparing the two authors. Some themes of the course will be: the moral and aesthetic value of physical combat; the genres epic and pastoral and the world-views they entail; the construction of gender; the grand style; and the interweaving of egalitarian and hierarchical paradigms.

**[422 The Faerie Queene]**

4 credits. Not offered 1990–91.]

**423 Seventeenth-Century Lyric**

Spring. 4 credits.

M W 2:30–4:25. B. Correll.

A study of representative seventeenth-century English poets, both major and minor, male and female, secular and religious. In addition to giving attention to formal aspects of the poetry, we will consider questions of historical contextualization and notions of the self and of the poetic role. As we shall see in our readings, these seventeenth-century poets are both products and producers of their culture. We will also study the critical reception of seventeenth-century poetry and its place in contemporary English studies.

**[424 Lyric Sequences]**

4 credits. Not offered 1990–91.]

**427 Studies in Shakespeare**

Fall. 4 credits.

M W F 10:10–11. C. Levy.

A study of themes and patterns in Shakespeare's later history plays (*Richard II*, Parts I and II, *Henry IV*, and *Henry V*) in the perspective afforded particularly by Castiglione's *Book of the Courtier*, Elyot's *The Governour*, *A Mirror for Magistrates*, and Sidney's *The Countesse of Pembroke's Arcadia*. Among topics to be explored are growth, responsibility, play, order, and community.

Spring. 4 credits.

T R 2:55–4:10. S. McMillin.

A reading of major plays from the later fifteenth to the end of Shakespeare's career, including *As You Like It*, *Hamlet*, *Henry V*, *King Lear*, *Antony and Cleopatra*, *Measure for Measure*, and *The Winter's Tale*. Particular attention to the theory of theatre and the acting implied by these texts.

**[428 Elizabethan and Jacobean Drama]**

4 credits. Not offered 1990–91.]

**437 Fictions of Apartheid and Modes of Liberalism**

Spring. 4 credits.

T R 2:55–4:10. B. Jeyifo.

This course involves a study of selected works of four major contemporary white South African authors: Athol Fugard, Nadine Gordimer, Andre Poirier, and J. M. Goetzee. The genres include drama, fiction, the essay. Issues examined include modernity and Apartheid, constructions and deconstructions of racialized identity, ideological interpellations of subjectivity by juridical and cultural texts, revolutionary optimism and philosophical pessimism.

**[438 Inventing Human Nature: Passion and Experience in the Seventeenth and Eighteenth Centuries]**

4 credits. Not offered 1990–91.]

**440 English Romanticism after the Revolution**

Spring. 4 Credits.

T R 11:40–12:55. R. Parker.

A selection of verse and prose writings, including one or two novels and plays, from the later Romantic period, with emphasis on works by Keats, Mary Shelley, Percy Shelley, Byron, Hazlitt, DeQuincey, Austen, and Scott. Though the focus will be primarily on such works, readings and discussion will also involve developing critical and cultural traditions in the wake of the French Revolution, with special attention to the ways British writers and critics imagine and commemorate the Revolution and the Napoleonic aftermath.

**443 Caricature, Comedy, and Social Criticism**

Fall. 4 credits.

T R 1:25–2:40. S. Siegel.

This seminar, which will focus on selected plays and prose of Wilde, Synge, and Shaw, will consider Irish Celtic responses to Anglo-Saxon ethnocentricity and views of race. We will conduct our discussions against the background of the politics of Anglo-Irish social relations during the mid- and late-nineteenth century. Texts and visual representations will be drawn from, among others, Mill, Marx, Darwin, Lubbock, Mueller, Clodd, Lang, Frazer, as well as the periodical literature. Literary texts will include *Lady Windermere's Fan* and *The Importance of Being Earnest*, *Playboy of the Western World*, *John Bull's Other Island*, *Pygmalion*, and the tales of Handy Andy.

**450 The History of the Book**

Fall. 4 credits. Limited to 20 students.

Prerequisite: permission of instructor.

T 1:25–3:20. D. Eddy.

A study of the physical aspect of books printed during the last six centuries. Included are papermaking, typography and printing, bookbinding, and the history of book illustrations; the transmission of texts and bibliographical descriptions of hand-printed and modern trade books. Above all, this is the study of the book as a work of art.

**[451 The Long Poem in America]**

4 credits. Not offered 1990–91.]

**452 Doris Lessing and Thomas Pynchon**  
Spring. 4 credits.

TR 11:40–12:55. M. Hite.

At first glance, these two writers might appear to have little in common beyond their status as major figures in contemporary fiction. They belong to—and identify themselves with—different generations (Lessing was born in 1910, Pynchon in 1937) and different nationalities (Lessing is an English colonial, Pynchon an American). They manifestly appeal to very different kinds of reader, at least in part because they became writers by very different routes (Lessing is largely self-taught through her own reading and political involvements, whereas Pynchon is a Cornell alumnus whose first declared major was Engineering Physics). And of course Lessing is female whereas Pynchon is male. But the similarities are worth pursuing. Both have been pioneers in the development of the encyclopedic narrative in the postmodern period, and both have used encyclopedism as a vehicle for far-reaching structural and stylistic experimentation. Both have strong and evolving political concerns that have made them controversial throughout their writing careers. And both are visionaries, notoriously “difficult” because of the scope and courage of their imaginative enterprises.

This class will take on the most ambitious of the novels: Lessing's *The Golden Notebook* and *The Four-Gated City*; Pynchon's *V.*, *Gravity's Rainbow*, and *Vineland*. Additional readings include a play and several short stories by Lessing and several short stories by Pynchon. Seminar format, with student presentations, a number of in-class writings, and two major papers.

**[453 Public Aesthetics: Art, Video, and Spectacle in the Age of Technology]**

4 credits. Common Learning. T. Murray. Not offered 1990–91.]

**[454 Slave Narratives and the Production of Black Literature]**

4 credits. Not offered 1990–91.]

**455 Literature of 1890s**

Spring. 4 credits.

TR 2:55–4:10. S. Parrish.

The last decade of the century, the so-called mauve decade, embraces the end of the esthetic movement, the end of Victorian England, and the beginnings of modernism. To sample its rich variety, readings in Wilde, Housman, Hopkins, some of the “decadent” poets of the Rymers Club, and minor novelists like Gissing and George Moore will be ranged alongside some major voices like Conrad, Shaw, Hardy, and the early Yeats.

**456 Edith Wharton, Willa Cather, and Eudora Welty (also Women's Studies 456)**

Fall. 4 credits.

TR 1:25–2:40. J. Blackall.

A representative selection of the best fiction of three distinguished American women writers with particular regard for their representation of women in relation to environment, for their characteristic themes and materials, and for their practice of the craft of fiction. Readings: Wharton, *The House of Mirth*, *Summer*, *The Age of Innocence*, and selected short stories; Cather, *O Pioneers!*, *A Lost Lady*, *The Professor's House*, and selected short stories; and Welty, *The Robber Bridegroom*, *The Golden Apples*, *The Optimist's Daughter*, and selected short stories. Discussion format with three essays.

**[462 Dickinson and Thoreau]**

4 credits. Not offered 1990–91.]

**[463 Memory, Nostalgia, and Repetition in Modern Poetry and Poetics]**

4 credits. Not offered 1990–91.]

**[464 Black Women Writers]**

4 credits. Not offered 1990–91.]

**465 Proseminar in American Studies (also American Studies 465)**

Spring. 4 credits.

W 1:25–3:20. J. Porte and members of the American Studies Program.

Selected topics in American history, literature, the arts, and politics. Recommended for American Studies majors.

**466 Wallace Stevens, T. S. Eliot, and the Making of the High Modern Tradition**

Spring. 4 credits.

TR 10:10–11:25. D. Schwarz.

A close reading of two major twentieth-century poets in the context of literary and cultural modernism, including developments in the visual arts, such as cubism. Although more time will be spent on Stevens than Eliot, major works of both figures will be discussed in detail. We shall discuss how Eliot, an expatriate and neoclassicist, contributed to the making of the modern poetic. We shall then turn to Stevens who will be examined as an American figure, as a high modernist, and as an heir to the Romantic tradition.

**[467 Afro-American Literature—1960s]**

4 credits. Not offered 1990–91.]

**468 Language Poetry (also Comparative Literature 498)**

Spring. 4 credits.

W 1:30–3:20. J. Monroe.

The emergence in the United States in the 1970s and 1980s of “Language Poetry” or “Language Writing” as a challenge to more familiar modes of contemporary poetry raises fundamental questions about what poetry has been, is, and should be and about the relationship between poetry, audience, and social transformation. Focusing on texts by Charles Bernstein, Bob Perelman, Ron Silliman, Rosmarie Waldrop, and others associated with the Language Poetry movement, we will explore the movement's acknowledged indebtedness to such precursors as Gertrude Stein, Louis Zukofsky, and Robert Creeley and to philosophical and theoretical writings by such figures as Ferdinand de Saussure, Valentin Voloshinov, and Ludwig Wittgenstein. Considering as well Language Poetry's critical reception over the past several years, we will attempt to arrive at an understanding of the movement's significance for theories of the avant-garde and the conditions of postmodern culture.

**469 William Faulkner**

Spring. 4 credits.

TR 1:25–2:40. H. Spillers.

This course will examine selected writings of William Faulkner, beginning with some of the early novels (*The Sound and the Fury*, *Light in August*, *Absalom, Absalom!*) and concluding with *A Fable*. We will consider Faulkner's impact as a maker of myth and as one of the leading figures of a literary discourse that creates a modernist sensibility in American letters. As a southern writer, Faulkner is traditionally confined to the character study of exotic types, but his systemic fictional exploration of “violence and the sacred” provides a powerful clue to the larger issue of a national identity. Faulkner in his own terms, dared to imagine “culture” as a problem for fiction. This course will attempt to consider the outcome.

**470 Studies in the Novel: Joyce's *Ulysses***

Fall. 4 credits. Limited to 15.

TR 2:55–4:10. D. Schwarz.

A thorough episode-by-episode study of the art and meaning of Joyce's *Ulysses*. We shall place *Ulysses* in the context of Joyce's canon, Irish culture, and literary modernism, including painting and sculpture. We shall explore the relationship between *Ulysses* and other experiments in modernism and show how it redefines the concepts of epic, hero, and reader. We shall discuss how *Ulysses* raises major issues in literary study and tests various critical and scholarly approaches. Such a self-conscious inquiry into theories and methods should prepare students to confront other complex texts.

**472 Irish Culture**

Spring. 4 credits. Limited to 15.

TR 1:25–2:40. P. Marcus.

Intensive study of a small number of major poems by Yeats, usually one or two per week. The texts will be seen in the context of Yeats's Irish and occult interests. Some attention will be given also to the plays and *A Vision*.

**[475 Feminist Literary Criticism]**

4 credits. Not offered 1990–91.]

**[477 Children's Literature]**

4 credits. Not offered 1990–91.]

**480–481 Seminar in Writing**

Fall and spring. 4 credits. Each section limited to 15 students. Students are encouraged to take English 280–281 and either 382–383 or 384–385 previously. Prerequisite: permission of instructor, normally on the basis of a manuscript.

480 Fall: T 2:30–4:30. M. McCoy;

MW 12:20–1:10. A. Lurie. 481

Spring: W 2:30–4:25. R. Morgan;

MW 11:15–12:05. D. McCall.

Intended for those writers who have already gained a basic mastery of technique. Students normally enroll for both terms and should be capable of a major project—a collection of stories or poems, a group of personal essays, or perhaps a novel—to be completed by the end of the second semester. Seminars are used for discussion of the students' manuscripts and published works that individual members have found of exceptional value.



**491 Honors Seminar I**

Fall. 4 credits. Prerequisite: permission of Director of the Honors Program.

Section 1. Renaissance Texts: Power and Identity

M W 2:30-3:45. B. Correll.

The course will deal with a lively body of Renaissance cultural texts from English and Continental authors, some of whom are well known and others who should be better known. Our concern will be with changing relations of power in early modern Western society, the question of the relationship between literature and political life, the theme of self-fashioning and masculine subject formation in which a discourse on women figures prominently. We will also investigate the critical and scholarly treatments of these cultural issues.

Section 2. Hawthorne and his Contemporaries  
T R 2:55-4:10. S. Samuels.

An intensive study of Hawthorne's major works, especially in terms of their response to the contemporary background of utopias, nationalism, and abolition. We will read *The Scarlet Letter*, *The House of the Seven Gables*, *The Blithedale Romance*, and a number of Hawthorne short stories. And we will also read selected works by Hawthorne's contemporaries, such as Margaret Fuller, Catherine Sedgwick, and Lydia Maria Child.

**492 Honors Seminar II**

Spring. 4 credits. Prerequisite: permission of Director of the Honors Program.

Section 1. Sex and Gender and the Power of Words: Novels of Charlotte Bronte

T R 1:25-2:40. C. Chase.

An introduction to the close reading of fiction and literary criticism and theory. How does the first person narrative voice in *Jane Eyre* reflect and create what it is to be a woman—and a person—in the nineteenth century, and since? In this seminar we will read intensively the fiction of Charlotte Bronte and critical and theoretical writing that will help us to grasp the ways in which her fiction constructs connections between subjectivity and femininity and masculinity. We will also read, for comparative purposes, Mary Shelley's *Frankenstein* or George Eliot's *Adam Bede*, with their quite different approaches to the question of how being human relates to being of a particular sex. The aim of the seminar will be to read a few works thoroughly and to explore the effectiveness of different interpretive procedures and critical arguments. Requirements will include frequent short writing assignments providing the basis for class discussions, early in the course, and a final paper which may be written by two students working together.

Section 2. Mayhem, Myth and Modernism. Limited to 15.

T R 2:55-4:10. P. Marcus.

Vision and form in major texts from the period between the world wars. An exploration of the search for values in a troubled era and of concomitant formal experiments. The syllabus will include Lawrence, *Women in Love*, Joyce, *Ulysses* (selections); Pound, *Hugh Selwyn Mauberley* and *The Cantos*; Eliot, *The Waste Land* and *Four Quartets*; Woolf, *Mrs. Dalloway* and *To the Lighthouse*; Hemingway, *The Sun Also Rises*; and Yeats, *The Tower* and *Last Poems*. Some attention will be given to parallel developments in the visual arts and to the work of Frazer in anthropology and Jung in psychology.

**493 Honors Essay Tutorial I**

Fall or spring. 4 credits. Prerequisites: senior standing and permission of Director of the Honors Program.

Staff.

**494 Honors Essay Tutorial II**

Fall or spring. 4 credits. Prerequisites: English 493 and permission of Director of the Honors Program.

Staff.

**495 Independent Study**

Fall or spring. 2-4 credits.

**Courses Primarily for Graduate Students**

Permission of the instructor is a prerequisite for admission to courses numbered in the 600s. These are intended primarily for graduate students, although qualified undergraduates are sometimes admitted. Undergraduates seeking admission to a 600-level course should consult the instructor. The list of courses given below is illustrative only; a definitive list, together with course descriptions and class meeting times, is published in a separate department brochure before course enrollment each term.

**Graduate English Courses 1990-91**

Fall.

**600 Colloquium for Entering Students****611 Introduction to Old English (also 411)**

R. Farrell.

**619 Chaucer**

W. Wetherbee.

**627 Shakespeare**

S. McMillin.

**632 Reading Swift's Poetry**

F. Bogel.

**642 Romantic Poetry**

M. Jacobus.

**645 Nineteenth-Century Prose**

P. Sawyer.

**663 American Fiction 1870-1915**

J. Porte.

**664 Post-war American Poetry**

R. Gilbert.

**683 Comparative African and African-American Twentieth-Century Critical Theory**

B. Jeyifo.

**685 Slave Narrative and Production of Afro-American Literature**

H. Mullen.

**702 Literature and Theory (also English 302)**

J. Culler.

**759 Virginia Woolf**

M. Hite.

**780.1 MFA Seminar: Poetry**

P. Janowitz.

**780.2 MFA Seminar: Fiction**

S. Vaughn.

**785 Reading of Fiction**

Spring.

A. Lurie.

**612 Beowulf (also English 412)**

R. Farrell.

**614 Medieval Drama**

B. Adams.

**630 Aesthetics in the Eighteenth Century**

N. Saccamano.

**644 Theatre, Revolution, Romanticism**

R. Parker.

**649 Victorian Twilight: The Eighteen-Nineties**

S. Parrish.

**659 Regional Fiction by Women Writers**

J. Blackall.

**670 Joyce's Ulysses**

D. Schwarz.

**672 The English Realist Novel**

H. Shaw.

**679 Topics in American Poetry**

D. Fried.

**710 Readings in Old English**

T. Hill.

**781.1 MFA Seminar: Poetry**

A. Ammons.

**781.2 MFA Seminar: Fiction**

D. McCall.

**FILM**

See listings under Department of Theatre Arts.

**FRENCH LANGUAGE AND LINGUISTICS**

See Department of Modern Languages and Linguistics.

**FRENCH LITERATURE**

See Department of Romance Studies.

**FRESHMAN WRITING SEMINARS**

For information about the requirements for freshman writing seminars and descriptions of seminar offerings, see p. 311 and consult the John S. Knight Writing Program brochure, available from college registrars in August for the fall term and in November for the spring term.

## GEOLOGICAL SCIENCES

D. L. Turcotte, chair; A. L. Bloom, director of undergraduate studies; R. Allmendinger, M. Barazangi, W. A. Bassett, J. M. Bird, L. D. Brown, L. M. Cathles, J. L. Cisne, B. L. Isacks, T. E. Jordan, D. E. Karig, S. Kaufman, R. W. Kay, J. E. Oliver, F. H. T. Rhodes, W. B. Travers, W. M. White

As an intercollege unit, the Department of Geological Sciences has degree programs in both the College of Arts and Sciences and the College of Engineering.

Within the past few years, studies of the earth have become increasingly important. The need for increased understanding of plate tectonics, limited energy and mineral reserves, awareness of natural hazards such as earthquakes and volcanic eruptions, and an increasing concern for our environment encourage studies of the earth by geologists. Consequently, interest in geology courses has greatly increased.

There are eighteen faculty members, including Cornell's president, in the department, and twenty-five undergraduate majors. A variety of courses provides our students with a broad and solid foundation. The department is particularly strong in geophysics, petrology and geochemistry, structural geology, and tectonics.

Students study the deeper parts of the earth's crust using many techniques but concentrating on seismic methods. High-pressure, high-temperature mineralogy research uses the diamond anvil and Cornell's synchrotron as research tools. Undergraduates have served as field assistants for faculty and graduate students who work in Greenland, British Columbia, the Aleutian Islands, Scotland, Barbados, the South Pacific, South America, and various parts of the continental United States. Undergraduates are encouraged to participate in research activities, sometimes as paid assistants.

Students who major in geological sciences are encouraged to take courses appropriate to their interests in the other sciences and mathematics. To develop skills in observing the natural earth, geology majors attend a summer field camp, usually during the summer following their junior year.

**The Major**

The prerequisites for admission to a major in geological sciences in the College of Arts and Sciences are two two-semester sequences, Mathematics 191–192 and Physics 112–113, or their equivalents, and an additional semester course in chemistry or biological sciences, such as Chemistry 207. Geological Sciences 101, 103, 111, or 201 followed by 102, 104, or 202 are recommended, but a student with a strong foundation in mathematics and science may be accepted as a major without completion of an introductory sequence.

Majors take Geological Sciences 210 and 214, the five core courses in geological sciences, a summer field geology course, 6 credits of additional course work from geological sciences courses numbered 300, 400, or 600, plus an additional course in mathematics, computer science, physics, chemistry, or biology at an intermediate or advanced level.

*Core Courses***326 Structural Geology****355 Mineralogy****356 Petrology and Geochemistry****375 Sedimentology and Stratigraphy****388 Geophysics and Geotectonics**

Prospective majors should consult one of the following departmental major advisers—W. A. Bassett, A. L. Bloom, L. M. Cathles, J. L. Cisne, or B. L. Isacks—as early as possible for advice in planning a program. Students majoring in geological sciences may attend the departmental seminars and take advantage of cruises, field trips, and conferences offered through the Department of Geological Sciences.

Courses offered at the 100 and 200 level are open to all students. Certain 300-level courses in geology may be of particular interest to students of chemistry, biology, ecology, and physics. Students are encouraged to inquire about courses that interest them at the department office in Snee Hall.

**Honors.** An honors program is offered by the Department of Geological Sciences for superior students. Candidates for honors must maintain an overall 3.0 grade-point average and a cumulative average of 3.5 in the major and complete an honors thesis (Geological Sciences 490). Students interested in applying should contact the director of undergraduate studies during the second semester of the junior year.

**Courses**

For course descriptions, see the Geological Sciences listing in the College of Engineering.

**101 Introductory Geological Sciences**  
Fall, spring, or summer. 3 credits.

2 lects, 1 lab, field trips, evening exams.

Fall: W. B. Travers; spring: J. M. Bird.

This course teaches observation and understanding of the earth, including oceans, continents, coasts, rivers, valleys, and glaciated regions; earthquakes, volcanoes, and mountains; theories of plate tectonics; the origin, discovery, and development of mineral and water resources. The lab teaches use of topographic and geologic maps and recognition of minerals and rocks and includes field trips to Cascadilla Gorge, Fall Creek, and Enfield Glen.

**102 Evolution of the Earth and Life****103 Geology in the Field****104 Introduction to Oceanography****107 Frontiers of Geology I****108 Frontiers of Geology II****111 To Know the Earth****201 Introduction to the Physics and Chemistry of the Earth****202 Environmental Geology****210 Introduction to Field Methods in Geological Sciences****212 Special Field Trip****213 Marine and Coastal Geology****214 Western Adirondack Field Course****326 Structural Geology****355 Mineralogy****356 Petrology and Geochemistry****375 Sedimentology and Stratigraphy****388 Geophysics and Geotectonics****401 Field Geology****412 Experiments and Techniques in Earth Sciences****424 Petroleum Geology****431 The Earth's Crust: Structure, Composition, and Evolution****432 Digital Processing and Analysis of Geophysical Data****433 Exploration Seismology I: Data Acquisition and Processing****434 Exploration Seismology II: Analysis and Interpretation****441 Geomorphology****442 Glacial and Quaternary Geology****445 Geohydrology****452 X-Ray Diffraction Techniques****453 Modern Petrology****454 Advanced Mineralogy****456 Geochemistry****474 Modern Depositional Systems****476 Sedimentary Basins: Tectonics and Mechanics****478 Advanced Stratigraphy****479 Paleobiology****487 Geophysical Prospecting****489 Earthquakes and Tectonics****490 Senior Thesis****491–492 Undergraduate Research****500 Design Project in Geohydrology****501 Geohydrology Design Project Seminar****502 Case Histories in Ground Water Analysis****621 Marine Tectonics****622 Advanced Structural Geology I****624 Advanced Structural Geology II****625 Tectonic History of Western North America from Craton to Terranes****628 Geology of Orogenic Belts****635 Advanced Geophysics I****637 Advanced Geophysics II****655 Isotope Geochemistry****681 Geotectonics****687 Seismology****695 Computer Methods in Geological Sciences****700–799 Seminars and Special Work****721 Tectonic and Stratigraphic Evolution of Sedimentary Basins****722 Advanced Topics in Structural Geology**

- 725 Rock and Sediment Deformation**
- 731 Plate Tectonics and Geology**
- 741 Advanced Geomorphology Topics**
- 751 Petrology and Geochemistry**
- 753 Mineralogy and Crystallography, X-Ray Diffraction, Microscopy, High-Pressure/Temperature Experiments**
- 755 Advanced Topics in Petrology and Tectonics**
- 757 Current Research in Petrology**
- 762 Advanced Topics in Petroleum Exploration**
- 771 Advanced Topics in Sedimentology and Stratigraphy**
- 773 Paleobiology**
- 780 Seismic Record Reading**
- 781 Geophysics, Exploration Seismology**
- 783 Advanced Topics in Seismology and Tectonics**
- 785 Exploration Seismology, Gravity, Magnetism**
- 788 Geophysics, Seismology, and Geotectonics**
- 789 Research on Seismic-Reflection Profiling of the Continental Crust**
- 793 Andes Seminar**
- 796 Geochemistry of the Solid Earth**
- 797 Fluid-Rock Interactions**
- 799 Contemporary Issues in Groundwater Hydrology**

## GERMAN STUDIES

A. Groos, chair; G. Waite, director of undergraduate studies; D. Bathrick,

B. Buettner, H. Deinert, I. Ezergailis, S. L. Gilman, P. U. Hohendahl, C. A. Martin, P. M. Mitchell, L. M. Olschner

The Department of German Studies offers courses in German, Medieval German, Yiddish, and Old Icelandic area studies. Major areas of specialization cover the period from the early Middle Ages to the twentieth century. While the emphasis remains on literature, the department teaches film, theater, the political culture of the two Germanys, women's studies, music, intellectual history, and Jewish studies. Courses are designed with the general student population in mind; courses taught in German demand knowledge of the German language. The department often cosponsors courses with the departments of Comparative Literature, History, History of Art, Government, Music, Near Eastern Studies, and Theatre Arts, as well as with the Medieval Studies and Women's Studies programs and in the history of science. For further information about majors and courses, see Modern Languages and Linguistics.

### The Major

Students majoring in German are encouraged to design their programs in a manner that will allow for diversity in their courses of study. It should enable them to become acquainted with an adequate selection of major works,

authors, and movements of German literature and to develop their skill in literary analysis. Students majoring in German will normally proceed through German 201, 202, 203, 204. Students who, because of previous training, are qualified to enroll in 300- or 400-level courses will be permitted to do so. For details, students may consult the director of undergraduate studies, G. Waite, in the Department of German Studies, or W. Harbert, in the Department of Modern Languages and Linguistics. Students majoring in German are expected to complete successfully a minimum of six 300- and 400-level courses in addition to German 303-304. Some 200-level courses offered by this department (such as German Studies 211 and 283) and related departments will count toward the major as well; please consult your adviser. These courses should be a representative selection of subjects in German literature, Germanic linguistics, or both. The attention of students majoring in German is called to the courses offered by departments and programs such as Comparative Literature, History, History of Art, Government, Music, Society for the Humanities, Theatre Arts, and Women's Studies, many of which complement the course offerings in German.

Students majoring in German are expected to become competent in the German language. This competence is normally demonstrated by the successful completion of German 304. Placement of German majors who have done no work in German at Cornell will be determined by the level of preparation they have obtained elsewhere. For information, students should consult the director of undergraduate studies, G. Waite, or W. Harbert.

### The German Area Studies Major

The German area studies major is intended for students who are interested in subject matter related to German-speaking countries but not necessarily or not exclusively in German literature or linguistics. Students will select appropriate courses offered in history, government, economics, music, theater arts, or other suitable subjects. Minimum course requirements for the German area studies major are the same as for the German major. These students will select a committee of two or more faculty members to help them design a program and supervise their progress. One committee member must be from the German faculty of either the Department of Modern Languages and Linguistics or the Department of German Studies. The other member(s) should represent the student's main area of interest.

The student majoring in German area studies is expected to become competent in the German language. Such competence is normally demonstrated by successful completion of German 304. A minimum of six area courses above the 200-level is required for the major.

**Advanced Standing.** Students coming to Cornell with advanced standing in German and/or another subject often find it possible to complete two majors. Recent double majors have combined history, psychology, chemistry, biology, or physics with German literature or German area studies. Students in Agriculture and Engineering have entered dual degree programs.

**Honors.** The honors program in German is open to superior students who want to work independently in an area of their own choice. Students are free to select any faculty member of the Field of Germanic Studies (in the case of area studies majors, the appropriate member of their committee) to assist them in designing their honors program, to supervise their work, and to help them select a suitable topic for an honors essay. The independent study courses, German 451 and 452, may form part of the program.

### Study Abroad

Cornell has a formal agreement with the University of Hamburg enabling its undergraduates to take courses in any field offered by the German university. The program offers a challenging course of study and the experience of total immersion in German life and culture. Participants in this program attend a required 3-credit orientation course in September, which is designed to help them adjust to the academic and social life of Germany. Special field trips are organized as part of the orientation session. Beginning in mid-October, students enroll as fully matriculated students at the University of Hamburg.

Cornell maintains a center in Hamburg with appropriate support staff. The resident director is a faculty member from Cornell, who teaches a special seminar each semester, provides academic advice, and helps ensure the quality of the courses. The center, which includes a classroom, a small library, and word-processing facilities, is used by students for the orientation session, special seminars, tutorials, lectures, and informal gatherings.

Applicants are expected to have attained at least proficiency in German prior to departure. Students are strongly encouraged to study abroad for the entire year rather than for one semester. For further information, students should contact the director of undergraduate studies and the director of Cornell Abroad.

### Freshman Writing Seminar Requirement

The following courses will satisfy the freshman writing seminar requirement: German 109, 151, 175, 211, and 312. For details students should consult the instructors.

Fees. Depending on the course, a small fee may be charged for photocopied texts for course work.

### Literature

#### Freshman Writing Seminars

##### 107 Images of the Individual and Society

Fall. 3 credits.

TR 2:55-4:10. A. Terhune.

This course will examine several texts of the nineteenth and twentieth centuries, exploring their various treatments of the individual and society, and discussing such issues as sanity and madness, and private ethics and public mores. We will be reading short fiction, drama, and other prose works by authors such as Büchner, Nietzsche, and Dürrenmatt. We will closely examine the role style plays in each of the texts we read, as well as looking at our own writing and thinking skills and styles.

**109 Fairy Tales and the Literary Imagination**

Fall or spring. 3 credits.

M W F 9:05-9:55, 10:10-11, 11:15-12:05,  
or T R 8:40-9:55. I. Ezergailis and staff.

Starting with the fairy-tale collection of the Brothers Grimm, we will trace the reverberation of fairy-tale elements in German literature, primarily from the nineteenth century. Preoccupation with the writing process—especially in the German romantic tradition—will be fruitful for the development of writing skills.

**151 Kafka, Hesse, Brecht, and Mann**

Fall or spring. 3 credits.

Lec, M 10:10-11; secs, W F 10:10-11 or  
T R 10:10-11. H. Deinert and staff.

This course will be based on complete works (in English translation) by four representative German authors of the first half of the century. Although dealing with works of great popular appeal (*Demian*, *Siddhartha*, *Death in Venice*, *The Metamorphosis*, *Mother Courage*, *Galileo*, and others), the emphasis of the course will be on improving writing skills. We will meet once a week for a combined lecture. In addition, there will be regular conferences between students and their instructors to discuss the papers.

**175 Cinema and Society**

Fall or spring. 4 credits. No knowledge of German required; all films dubbed or with subtitles. Students must view each film twice; group screenings on Monday evenings, 7:30-9:30 pm, although individual viewing times can be arranged. No more than eight films viewed per term.

T R 10:10-11:25 or 11:40-12:55. G. Waite and staff.

What are movies, how do they function in society, and how might we interpret them? This seminar has three basic and interrelated aims: 1) to provide students with the tools necessary to view all movies analytically and critically; 2) to sharpen students' abilities to articulate their ideas about what they see, and 3) to introduce the German cinema as an exciting, complex, influential cultural and social practice. We place special emphasis on recent movies, but in the context of historical development from the earliest silent flicks up to the present. Since we also compare the German cinema to Hollywood and independent production in the United States, films screened have included *The Cabinet of Dr. Caligari*, *Girls in Uniform*, *M*, *Comradeship*, *The Marriage of Maria Braun*, *The Lost Honor of Katharina Blum*, *Stroszek*, *The American Friend*, *Germany in Autumn*, *Paris, Texas*, *Psycho*, *Night of the Living Dead*, and *Easy Rider*.

**Courses Offered in German****201 Introduction to German Literature I: Prose**

Fall or spring. 3 credits. Prerequisite: qualification in German or permission of instructor. Taught in German. Fulfills both the language proficiency requirement and, followed by German 202 or another German literature course at the 200 level or above, the humanities distribution requirement.

Fall: M W F 12:20-1:10 or T R  
10:10-11:25; spring: M W F 9:05-9:55.  
L. M. Olschner and staff.

An intermediate course designed to improve reading, writing, speaking, and listening skills in German. Emphasis is placed on developing reading competency, tools of literary analysis,

and expansion of vocabulary. Grammar review included. The complexities of inner and outer reality as expressed in selected prose works of Bachmann, Brecht, Kafka, Mann, Dürrenmatt, Aichinger and others.

**202 Introduction to German Literature II: Drama**

Fall or spring. 3 credits. Prerequisite: German 201 or permission of instructor. Taught in German. Fulfills both the language proficiency requirement and, together with German 201 or another German literature course at the 200 level or above, the humanities distribution requirement.

Fall: M W F 12:20-1:10; spring: M W F  
12:20-1:10 or T R 10:10-11:25.  
L. M. Olschner and staff.

An intermediate course designed to improve reading, writing, speaking, and listening skills in German. Emphasis is placed on developing reading competency, tools of literary analysis, and expansion of vocabulary. Self-confrontation and social conflict in the plays of major Austrian, Swiss, and German dramatists, including Dürrenmatt, Brecht, Frisch, Hofmannsthal, Goethe, and Schiller.

**211 Intensive Workshop in Germanic Studies for Freshmen I**

Fall. 6 credits. Intended for entering freshmen with extensive training in the German language (CPT achievement score of 650 or comparable evidence; please consult instructor). Taught in German. Satisfies the language and distribution requirements or the freshman writing seminar requirement.

T R 1:25-3:20. H. Deinert.

Not intended as a survey but rather as a rigorous seminar designed to familiarize students with literary forms and the tools of critical analysis. The course will provide an intensive introduction to the study of German literature through the discussion of exemplary prose works, dramas, and poems from the eighteenth and nineteenth centuries.

**307 Modern Germany**

Spring. 4 credits. Prerequisite: German 202 or equivalent. Taught in German.

T R 10:10-11:25. L. M. Olschner.

Introduction to the history of postwar Germany, the development of the two Germanys, and their societies. The emphasis is on cultural and social institutions such as mass media, educational systems, and political parties. Further topics include women, reunification, the student movement, and terrorism. We will also follow the rapid changes taking place in Germany today in light of the recent past. Texts are complemented by films and music.

**312 Intensive Workshop in Germanic Studies for Freshmen II**

Spring. 4 credits. May be used to satisfy the freshman writing seminar requirement. Taught in German.

T R 1:25-3. H. Deinert.

Designed primarily as a sequel to German 211. Emphasis is on German literature since 1900 (T. Mann, Hesse, Kafka, Brecht, Dürrenmatt, Peter Weiss, Plenzdorf, Rilke, Benn, Celan). Supplementary reading from contemporary philosophy, psychology, sociology, and political theory.

**[337 The German Novelle**

Fall. 4 credits. Prerequisite: German 201-202 or permission of instructor. Taught in German. Not offered 1990-91.

M W F 9:05-9:55. B. Buettner.

An investigation of the development of the German *Novelle* as a major literary genre during the nineteenth and twentieth centuries. We will discuss the *Novelle* as a genre in relation to the changing literary and cultural context. Readings will include works by Goethe, Kleist, Tieck, Goethe, Hofmannsthal, Mann, and Grass.)

**[353 Kleist**

Spring. 4 credits. Prerequisite: German 201-202 or permission of instructor. Taught in German. Not offered 1990-91.

W 1:25-3:20. H. Deinert.

Reading and analysis of selected dramas, novellas, and essays.]

**354 Schiller**

Spring. 4 credits. Prerequisite: German 201-202 or permission of instructor. Taught in German.

W 1:25-3:20. H. Deinert.

A discussion of Schiller's dramas, selected poetry, and philosophical and aesthetic writing against the political and intellectual background of eighteenth-century Europe.

**[355 The Age of Goethe**

Not offered 1990-91.]

**[356 Goethe's Faust**

Spring. 4 credits. Prerequisite: German 201-202 or permission of instructor. In addition to the regularly scheduled class time, there will be take home assignments and individual conferences. Not offered 1990-91.

W 1:25-3:20. G. Waite.

A close reading of Goethe's *Faust*, Parts I and II, with an introduction to representative criticism and literary theory, both during the Age of Classicism and subsequently.]

**[357 Major Works of Goethe**

Spring. 4 credits. Prerequisite: German 201-202 or permission of instructor. Taught in German. Not offered 1990-91.

W 1:25-3:20. H. Deinert.

*Götz*, *Tasso*, *Iphigenie*, *Werther*, *Faust*, *Wahlverwandtschaften*, *Novelle*, selections from critical writings, and poetry.]

**[358 Romanticism**

Fall. 4 credits. Prerequisite: German 201-202 or permission of instructor. Taught in German. Not offered 1990-91.

M W F 10:10-11. G. Waite.

A systematic survey of texts of early German romanticism. We will focus primarily on a close reading of exemplary works but do so always with attention to the larger ideological, historical, and social contexts from which European literature of the late eighteenth and early nineteenth centuries emerged.]

**[359 Heine and Büchner**

Spring. 4 credits. Prerequisite: German 201-202 or permission of instructor. Taught in German. Not offered 1990-91.

T R 10:10-11:25. G. Waite.

This course will introduce major themes and problems of early to mid-nineteenth-century German literature by way of a close, in-depth analysis of these two exemplary writers. Our special concern will be to discuss different modes of response by literature to the most pressing political and social issues of its day.]



**[360 Naturalism and Feminism]**

Not offered 1990-91.]

**[362 Modern German Literature II: Twentieth-Century Prose]**

Not offered 1990-91.]

**[363 Contemporary Literature]**

Not offered 1990-91.]

**[364 German Lyric Poetry of the Nineteenth Century]**

Fall. 4 credits. Prerequisite: German 201-202 or permission of instructor. Taught in German. Not offered 1990-91.

T R 1:25-2:40. L. M. Olschner.

This course will cover the period from the mid-1790s to the mid-1890s and interpret major texts from the mature Goethe to the young Hofmannsthal. Readings and discussions will illuminate the development of individual poets in their time, the transformation of poetic speech, and the history of forms. Questions of poetics, forms, reception, canon, and influence; the problem of epoch designation; and the role of poetry and the poet in society will complement the analyses. In the context of the romantic identification of music and poetry we will hear musical settings of representative poetic texts (Lieder by Müller/Schubert, Heine/Schumann, Mörike/Wolf, and Rückert/Mahler.)

**[365 German Poetry of the Twentieth Century]**

Fall. 4 credits. Prerequisite: German 201-202 or permission of instructor. Not offered 1990-91.

M W F 10:10-11. L. M. Olschner.

The course will focus on exemplary lyric texts by Rilke, Trakl, Benn, Brecht, and Celan, and include others by poets such as Lasker-Schüler, N. Sachs, and Bachmann, whose work helps define or question contexts of tradition, discontinuity, modernism, poetic canon, and hermeticism. In examining German Symbolism and Expressionism and their continuing traces, political and willfully non-political poetry, exile and Holocaust writing, and the late reception of Hölderlin, we shall attempt to understand the progression, digression, and regression of poetic language, the reactions of poets to historical pressures, and the problems of influence and originality, of formulating poetics, and of determining period or movement.]

**[367 From Thomas Mann to Christa Wolf]**

Fall. 4 credits. Prerequisite: German 201-202 or permission of instructor. Taught in German.

T R 11:40-12:55. D. Bathrick.

Students in this course will interpret and analyze selected texts from twentieth-century German literature. The works will be studied within the historical context in which they emerged and will cover the period from 1900 to the present. Authors to be treated include Franz Kafka, Thomas Mann, Hermann Hesse, Bertolt Brecht, Marieluise Fleisser, Paul Celan, Heinrich Böll, Günter Grass, Peter Handke, Ingeborg Bachmann, Christa Wolf, Ulrich Plenzdorf, Volker Braun, and others.

**[398 German Women Writers]**

Fall. 4 credits. Prerequisite: German 201-202 or permission of instructor. Taught in German.

T R 10:10-11:25. I. Ezergailis.

We'll read, closely, some contemporary German-language women novelists, including Christa Wolf, Imtraud Morgner, Ingeborg Bachmann, and selected German women's poetry.

**Courses in English Translation****283 Contemporary European Society and Culture (also Government 343 and History 283)**

Fall. 3 credits.

T R 2:55-4:10. G. Waite, J. Pontusson, J. Weiss.

The crisis of communist regimes in Eastern Europe has brought an end to the postwar division of Europe. At the same time, the European community is emerging as a major economic and political power in the world. This course explores these dramatic new developments against the background of an interdisciplinary and comparative investigation of postwar European politics, society, and culture. Topics include generational change, class structure, economic and social policy, new social movements, family and community life, film, and cultural criticism.

**[285 Contemporary European Society and Politics (also History 285 and Government 285)]**

Fall. 4 credits. Not offered 1990-91.

T R 2:30-3:45. S. L. Gilman, J. Pontusson.

This course is designed for students with an interest in, or experience of, various European countries, who wish to increase their knowledge of Western Europe. There are no formal prerequisites. This course provides a general introduction to modern European society and politics. Focusing on Britain and the countries of northern Europe, we will explore the meaning of current events and issues from a historical perspective. Topics will include the legacy of colonialism, class culture and the role of organized labor, immigrant workers and ethnic minorities, problems of national identities; new social movements (e.g., the "Greens" in West Germany), and European perceptions of the United States. The course will pursue these themes and others through films, newspaper articles, and literature as well as critical writings.]

**[314 Nietzsche, the Man and the Artist]**

Spring. 4 credits. Not offered 1990-91.

T R 2:55-4:10. S. L. Gilman.

An intensive reading of selections from Nietzsche's poetry, letters, and philosophical writings: *The Birth of Tragedy*, *The Gay Science*, *Thus Spake Zarathustra*, *Beyond Good and Evil*, *Ecce Homo*. His work will be read in the intellectual context of his time and will be interpreted both as a reflection of his intellectual development and as a manifestation of his literary genius. In discussing the literary aspect of his work, close attention will be paid to Nietzsche's poetics.]

**320 Postwar German Novel**

Spring. 4 credits.

T R 10:10-11:25. I. Ezergailis.

A reading, in English translation, of such post-1945 German novelists as Grass, Böll, Johnson, and Christa Wolf. This course is recommended for the concentration in modern European studies.

**[322 Medicine and Civilization (also Biology and Society 322 and HPST 322)]**

Spring. 4 credits. Not offered 1990-91.

T R 1:25-2:40. S. L. Gilman.

What is sickness? What is health? Who is the physician? Is a physical illness different from mental illness? Where is medicine practiced? Is being a patient or a doctor different from culture to culture and from age to age? This course will introduce the undergraduate

student to the historical and cultural context of medicine. Our sources will range from the texts of ancient Greek medicine to contemporary films and novels dealing with medicine. We will examine the historical and social context of mental illness as well as physical illness from the standpoint of patient, physician, and "society." All of the primary readings are available in English.]

**[327 Health and Disease (also Biology and Society 327 and Psychology 387)]**

Fall. 3 credits. Not offered 1990-91.

M 1:25-3:20. S. L. Gilman and others.

Everyone knows what health and disease are or do they? This Common Learning course on health and disease will explore some of the cultural, psychological, philosophical, anthropological, medical, economic, and political dimensions of these concepts to show how various models of disease function in contexts from business to engineering, from the military to the medical profession. The course will be divided into two segments: the first will examine the general implications of concepts of health and illness; the second will study these general principles as reflected in the definition, treatment, and mythmaking surrounding one specific disease: schizophrenia. The course will draw on specialists from throughout the university.]

**[338 Nineteenth-Century Drama]**

Fall. 4 credits. Prerequisite: German 201-202 or permission of instructor. Not offered 1990-91.

M W F 12:20-1:10. I. Ezergailis.

We will read, in German and with close attention, a selection of plays spanning the century. The list of authors includes Franz Grillparzer, Friedrich Hebbel, Georg Büchner, and ends with Gerhart Hauptmann.]

**346 German Women Writers in Translation (also Women's Studies 346)**

Spring. 4 credits.

T R 1:25-2:40. C. A. Martin.

The course will involve careful readings of the work of specific authors, (authors to change each semester); feminist discussions of the concept of "Women's Writing"; and attention to the socio-cultural and historical contexts in which the texts under discussion were written. In spring 1991 we will include twentieth-century German and German-Jewish writers and postwar West-German writers.

**[347 Reading Freud: Race, Gender, and Psychoanalysis (also Comparative Literature 347, English 347, HPST 347, and Psychology 389)]**

Fall. 3 credits. Lecture and discussion. In English. Not offered 1990-91.

F 1:25-3:20. S. L. Gilman.

This course will read a series of texts from the formative works of Sigmund Freud (beginning with the *Studies in Hysteria* and concluding with Freud's reading of the Schreber autobiography). These readings will be placed within the tension existing at the turn of the century between the concepts of the biology of race and the biology of gender. Close attention will be paid to the cultural, scientific, as well as polemical literature on the ideas of race and gender from the biological writings of the late nineteenth century. The course will also provide an introduction to the basic concepts of Freudian psychoanalytic theory.]

**[348 Women in Medieval Literature (also Comparative Literature 349 and Women's Studies 349)]**

Spring. 4 credits. Not offered 1990-91.

M W F 9:05-9:55. B. Buettner.

A study of women and their roles in the social order as portrayed in the literature of the Middle Ages. Readings will illustrate the range of attitudes toward women from asceticism and antifeminism to their idealization in courtly love lyric and romance. We will examine woman's putative influence in literature, both positive and negative, and on man and society, and the debates over woman's "proper" attitude and role. Works in English translation will include a play by Hroswitha of Gandersheim, the *Nibelungenlied*, *Willehalm*, selected Mariological and mystical poems, courtly love lyric, *Parzival*, and *Tristan and Isolde*.]

**[349 Anti-Semitism in Germany and the Jewish Response (also Near Eastern Studies 349)]**

Fall. 3 credits. Reading knowledge of German helpful, though the basic texts will be read in English. Not offered 1990-91.

M 1:25-3:20. S. L. Gilman.

An overview of the history of German anti-Semitism from Luther to Hitler. Readings from political, theological, and literary texts ranging from the Church Fathers (as background to a reading of Luther) to the anti-Semitic literary novels of the nineteenth century to

*Mein Kampf*. Parallel texts will be examined to judge the Jewish intellectual and literary response to evolving forms of German anti-Semitism.]

**[350 Yiddish Literature in English Translation]**

Not offered 1990-91.]

**[354 Modern Drama (also Theatre Arts 327 and Comparative Literature 354)]**

Fall. 4 credits. Not offered 1990-91.

T R 12:10-1:25. D. Bathrick.

Readings in European drama from Ibsen to the present.]

**[366 Broch and Musil]**

Fall. 4 credits. There will be an additional discussion section for students who can read the original German. Not offered 1990-91.

M W F 12:20-1:15. I. Ezergailis.

We will read, in English translation, selected prose of two important and challenging authors whose works span the disintegration of the Austro-Hungarian empire and the forming of new configurations in politics, culture, and art. Along with their penetrating cultural critiques, they are also known for radical experimentation with form and genre.]

**[374/674 Opera (also Music 274/674 and Italian 374)]**

Fall. 4 credits. Prerequisite: Music 252 or proficiency in German or Italian. Not offered 1990-91.

M W 11:15-12:05. D. Rosen.

A study of major works of the German and Italian repertory between 1780 and 1920. Among the issues to be considered will be source-libretto and words-music relationships, reception, and criticism. Works to be studied will include operas by Mozart, Verdi, Wagner, Puccini, and Strauss.]

**[381 Marxist Cultural Theory (also Comparative Literature 381)]**

Fall. 4 credits. Not offered 1990-91.

T R 12:20-1:35. W. Cohen, P. U. Hohendahl.

A historical survey of leading European Marxist thinkers, offering a critical perspective on culture, particularly in relation to ideology. Mainly a close reading of selected texts, but with consideration of historical contexts as well. Some emphasis on aesthetics and especially literary theory. Readings from Marx, Engels, Lukács, Gramsci, Brecht, Benjamin, Horkheimer, Adorno, Marcuse, Sartre, Althusser, and Williams.]

**[396 German Film (also Comparative Literature 396 and Theatre Arts 396)]**

Fall. 4 credits. Requirements: participation in class discussion, one paper, midterm, and final. Not offered 1990-91.

T R 11:40-12:55; screening, T 4:30.

D. Bathrick.

The goal of the course is to explore the form and context of German film in relation to the cultural and sociopolitical context of which it is a part. Accordingly, the material discussed will be divided into three major periods: Weimar film, 1918-1933; Nazi film 1933-1945; Postwar film, 1945-present. Readings and lectures will be devoted to formal and cultural developments in the history of German film as well as interpretive analysis of selected individual films. In both lectures and discussions, particular emphasis will be placed on helping students develop an appropriate method for viewing and analyzing films.]

**[399 Forms of Opposition: German Women Writers on the Nazi Period (also Comparative Literature 399 and Women's Studies 399)]**

Not offered 1990-91.]

**[419 Thomas and Heinrich Mann]**

Fall. 4 credits. Not offered 1990-91.

M W F 12:20-1:15. I. Ezergailis.

We will read, in translation, a group of texts by Thomas and Heinrich Mann (including *Buddenbrooks*, *Doctor Faustus*, *Henri VI*) and consider them as autonomous works and as witnesses to the dynamic of a brothers' strife that illuminates not only a model of psychological tensions but highly significant cultural and political configurations of a decisive time in German history. This is indeed "a brotherhood in which German history was mirrored . . . in all its agony." Essayistic and publicistic texts of both brothers will also be analyzed along with some of their correspondence. We will also read some background material to provide the needed social, political, and intellectual context. This course is recommended for the concentration in modern European studies.]

**[438/648 East and West German Drama: Post-1945 (also Theatre Arts 438/648)]**

Fall. 4 credits. Not offered 1990-91.

W 1:25-3:20. D. Bathrick.

This course will cover the major historical and textual developments in German theater from the end of World War II to the present. Leading dramatists from West and East Germany, Switzerland, and Austria (Brecht, Frisch, Dürrenmatt, Weiss, Hochhuth, Müller, Braun, Kroetz, Handke, and others) will be treated in light of the political events and aesthetic-dramaturgical traditions from which they emerge and with which they are taking issue.]

**[444/644 The Holocaust Survivor as Author (also Near Eastern Studies 444)]**

Spring. 3 credits. Reading knowledge of German helpful; however two of the major novels are available in English. Not offered 1990-91.

M 1:25-3:20. S. L. Gilman.

The topic will be the novels of the German-American writer Edgar Hilsenrath. Hilsenrath has written three major novels, including the best-selling, *The Nazi and the Barber*, on the topic of the Holocaust. His work is unique in that it uses black humor and satire to represent the world of the Holocaust. The seminar will cover the general literature on the writing of the Holocaust and look at the problems of Hilsenrath's work in the light of contemporary criticism (Langer, Des Pres, Steiner).]

**Course in Latvian****[376 Contemporary Soviet Latvian Literature]**

Fall. 4 credits. Prerequisite: permission of instructor. Taught in Latvian. Not offered 1990-91.

M W F 12:20-1:15. I. Ezergailis.

Analysis of the verse and prose of such world-caliber Soviet authors as Vacietis, Belsevica, Ziedonis, Peters, and Ezera. We will also examine the social and political climate surrounding their work by reading current newspapers as well as literary and theoretical periodicals.]

**Graduate and Advanced Undergraduate Courses****405 Introduction to Medieval German Literature I**

Fall. 4 credits. Prerequisite: reading knowledge of German.

M W F 9:05-9:55. A. Groos.

The course will emphasize learning Middle High German in a literary context, using the *Nibelungenlied* and a romance of Hartmann von Aue.

**406 Introduction to Medieval German Literature II**

Spring. 4 credits. Prerequisite: German 405 or equivalent.

M W F 9:05-9:55. A. Groos.

The course will survey the Classical period, emphasizing Wolfram von Eschenbach's *Parzival*, Gottfried von Strassburg's *Tristan und Isolde*, and major poets of the *Minnesang*, especially Walther von der Vogelweide.

**412 History and Society in the Postwar Short Story and Radio Play**

Fall. 4 credits. Prerequisite: 201-202 or permission of instructor. Taught in German.

M W F 11:15-12:05. L. M. Olschner.

We will study themes and responses of two popular postwar genres to historical and societal tensions and literary developments from 1945 to the present. Readings by major authors from both Germanys, Austria, and Switzerland will include Böll, Bachmann, Eich, Dürrenmatt, Wolf, and Plenzdorf. We will listen to recordings of some of the radio plays.

**416 Literary Translation in the West (also Comparative Literature 416)**

Spring. 4 credits. Prerequisite: good reading knowledge of German or French; any other language(s) desirable.

T R 1:25-2:40. L. M. Olschner.

A primary goal of this course is the exploration of the scope and limitations of translation and of the ambiguous area where the translated text seems to depart from its own nature and

become "original" writing. The course will be divided into three parts. The first is historical and theoretical with emphasis on, though not confined to, the German tradition; readings from Dryden, Humboldt, Benjamin, Buber, Steiner, and Derrida, among others, will define our context. The second part is analytical and will attend to the interpretation of translations in prose, poetry, and drama, especially those by writers themselves; among the authors we will read are Shakespeare, Hölderlin, Rimbaud, Mandelstam, Beckett, Joyce, and Valéry. The third part is a practical and experimental exercise of translating texts, to be chosen by our group, into the languages the course participants know best; the emphasis is on critical translation, and students will explicate their translations as a reflection on the translation process.

**417 Fascism and Mass Culture (also Comparative Literature 417, Society for the Humanities 417, and Theatre Arts 417)**

Fall. 4 credits. Taught in English. For advanced undergraduate and graduate students.

W 3:35–5:30. D. Bathrick.

In this course we will study the role and evolution of mass culture in the Third Reich between 1933 and 1945. In so doing, we will seek to demonstrate *why* and *how* the Nazis were able to use forms of aesthetic representation and mass media communication to establish and maintain political control during this period. Three things will be emphasized: (1) A comparative approach that will explore the similarities and differences in the developments of mass-mediated culture during the 1930s within liberal/capitalist, communist/Stalinist and fascist societies. (2) A focus upon the "aestheticizing of politics" (Walter Benjamin) by the Nazis as the key to understanding their appropriation of mass culture as a mode of domination. (3) Finally, as a main part of the course, a study of individual cultural documents of mass culture. This will include careful interpretive analysis of films (*Jud Süß, Triumph of the Will, Baron Münchhausen*), literature (popular novels, utopian novels, poetry, etc.) theater (the Nazi use of the classics such as Shakespeare, Goethe, Schiller; Nazi plays), and art (a study of Nazi painters: Arno Brekner, etc.).

**451–452 Independent Study**

451, fall; 452, spring. 1–4 credits each term.

Prerequisite: permission of instructor.

Hours to be arranged. Staff.

**490 From Literary Criticism to Marxist Theory: The Early Georg Lukács (also Comparative Literature 490 and Government 470)**

Fall. 4 credits. For advanced undergraduates and graduate students.

R 1:25–3:20. P. U. Hohendahl.

The writings of the late Lukács have occasionally obscured the importance of the young Lukács for the project of Western Marxism and Critical Theory. The seminar will reexamine the beginnings of neo-Marxist theory as it emerges out of the integration of neo-romantic cultural criticism and contemporary social theory (Simmel, Weber). The analysis will focus on Lukács' seminal texts, especially on *Soul and Form, Theory of the Novel*, and *History and Class Consciousness*.

**491 Mass Culture Revisited: From Popular Literature to the Culture Industry (also Comparative Literature 491 and Society for the Humanities 491)**

Fall. 4 credits. For advanced undergraduates and graduate students; taught in English. Reading knowledge of German required.

T 1:25–3:20. P. U. Hohendahl.

The purpose of this seminar is twofold: it is designed to engage in a critical dialogue with older and recent theoretical writings on mass culture (Adorno, Bausinger, C. Bürger, Howe, Huyssen, Jameson, L. Levine, MacDonald, Schenda); also, it is intended to investigate the emergence of modern mass culture in Germany. Historically, the course will focus on the period between 1830 and 1900 by tracing the transition from traditional forms of popular literature to its recasting after the industrial revolution. Special attention will be given to the relationship between established high culture and popular culture through an analysis of canon formation on the one hand and an examination of the critical and pedagogical discourse on popular literature on the other. Readings will be taken from the works of popular novelists, such as Marlitt, Courths-Mahler, Karl May, and Ganghofer. The discussion of their texts will include structural as well as contextual problems (literacy, reading public, book market).

**[495 The Aesthetic Theory of the Frankfurt School (also Comparative Literature 495)]**

Spring. 4 credits. Not offered 1990–91.

R 1:25–3:20. P. U. Hohendahl.

This course is designed as an introduction to the history of the Frankfurt School and the essential concepts of critical theory. The emphasis will be placed on the theory of culture and its application to the understanding of literature and aesthetics. The reading material will be taken from the works of Max Horkheimer, Theodor W. Adorno, Walter Benjamin, and Jürgen Habermas.]

**[497/697 The Hermeneutic Tradition (also Comparative Literature 497/697)]**

Fall. 4 credits. Not offered 1990–91.

W 2:30–4:25. Staff.

Hermeneutics is not so much a particular philosophy as an abiding yet developing tradition of reflexivity. The course will place this approach into a historical perspective, tracing it back to antiquity (St. Augustine), then following its development from eighteenth-century rationalism via romantic hermeneutics (Schleiermacher, E. A. Poe) and the contribution of the Historical School (Droysen) to *Geisteswissenschaften* (Dilthey). Finally, there will be a discussion of various twentieth-century trends (Bultmann, Ricoeur, Gadamer) reflecting the influence of Heideggerian phenomenology.]

**Seminars**

Note: For complete descriptions of courses numbered 600 or above consult the appropriate instructor.

**[605 Introduction to Modern German Literary Theory with an Emphasis on Contemporary Criticism (also Comparative Literature 605)]**

Fall. 4 credits. Not offered 1990–91.

R 2:30–4:25. P. U. Hohendahl.

The seminar will offer a survey of German criticism from 1900 to the present. Emphasis will be placed on the period from 1945 to the present. The aim of the course is to familiarize incoming graduate students with the main currents of German criticism. Readings will be taken from Heidegger, Staiger, Käte Hamburger, Szondi, Adorno, Jauss, and others.]

**[611 Seminar in Old Icelandic Literature I (also English 602)]**

Not offered 1990–91.]

**[612 Seminar in Old Icelandic Literature II (also English 612)]**

Not offered 1990–91.]

**[623 Seminar in Medieval German Literature I (also Medieval Studies 601)]**

Fall. 4 credits. Not offered 1990–91.

W 1:25–3:20. A. Groos.

Topic: *Minnesang*.]

**[624 Seminar in Medieval German Literature II]**

Spring. 4 credits. Not offered 1990–91.

T 1:25–3:20. A. Groos.

Topic: *Parzival*.]

**[625 The Northern Renaissance and Reformation]**

Spring. 4 credits. Not offered 1990–91.

M 1:25–3:20. S. L. Gilman.

Topic: disease and society in fifteenth- and sixteenth-century Germany. The course will center on the function of metaphors of disease in writers such as Erasmus, Luther, and Hutten and the relationship between these metaphors and the social perception of illness, especially the syphilis epidemics of the late fifteenth and early sixteenth centuries. Readings in German and Latin of major texts in intellectual and medical history.]

**626 Nuremberg**

Spring. 4 credits.

M 1:25–3:20. A. Groos.

An introduction to Nuremberg, in the late fifteenth and sixteenth centuries, with emphasis on its significance as an urban cultural center. Topics include the city's development and social structure, printing, the Reformation, *Meistersang*, and major cultural figures such as Albrecht Dürer, Hans Sachs, Willibald and Caritas Pirkheimer. The last part of the course will deal with the modern reception of "Nuremberg" by Goethe, the Romantics, Lortzing, and Wagner.

**[627 Baroque]**

Fall. 4 credits. Not offered 1990–91.

R 1:25–3:20. P. U. Hohendahl.

The seminar will focus on the development of German literature from 1620 to 1700 with an emphasis on its critical and historical assessment. The readings will stress the special nature of the Baroque period, i.e., its political and social structure, as well as its major religious and aesthetic tendencies, as a transition from feudalism to the early absolutism. The discussion will highlight the role of the poet, the function of literature, and the composition of the audience. All major genres (poetry, drama, novel) will be examined. Among the authors to be read will be Fleming, Grimmelshausen, Gryphius, Hofmannswaldau, Opitz, and Ziegler.]

**[629 The Enlightenment**

Fall. 4 credits. Not offered 1990-91.

R 1:25-3:20. P. U. Hohendahl.

The seminar will focus on eighteenth-century German literature and philosophy from 1730 to 1790. Emphasis will be placed on the concept of *Aufklärung* and its meaning for the development of German thought. The discussions will stress major areas of critical inquiry, such as religion, philosophy, and literature. Readings will be taken from authors like Forster, Gellert, Gottsched, Kant, Lessing, and Wieland. The critical literature will include the writings of Adorno, Foucault, Habermas, Horkheimer, and Koselleck.]

**[630 Classicism and Idealism**

Spring. 4 credits. Texts in German, discussion in English.

W 3:35-5:30. G. Waite.

A purpose of this seminar is to introduce some of the major poetic and philosophical texts generally considered to be in the canon of "Classicism" (roughly 1786-1832), while at the same time giving reasons to call the notion of a canon into question. We will consider especially the two great principles of the period: Goethe's *symbol* and Hegel's *dialectic*, and how they come together in the problem of *tragedy*. We will also submit these principles to their subsequent critique by such writers as Adorno, Benjamin, Dick, Foucault, Gadamer, Gramsci, Hyppolite, Kittler, Kojeve, Lenin, Lukács, Mao, and M. Rosen.

**[632 Faust**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

M 1:25-3:20. G. Waite.

An intensive analysis of parts I and II. Our task will be to combine techniques of close reading and attention to textual nuance with a concern for the history of the reception and appropriation of the text, including contemporary theory (e.g., hermeneutics, deconstruction, semiotics, feminism, and historical materialism.)

**[633 Hölderlin (also Comparative Literature 633)**

Spring. 4 credits. Conducted primarily in English, most texts in German; good reading knowledge of French useful, not required. Not offered 1990-91.

R 3:35-5:30. G. Waite.

We will read Hölderlin's major writings and some representative secondary scholarship.]

**[635 Backgrounds of German Realism**

Not offered 1990-91.]

**[636 Seminar on Richard Wagner (also Music 678)**

Not offered 1990-91.]

**[637 Freud and the *Fin de Siècle***

Fall. 4 credits. Reading knowledge of German necessary. Not offered 1990-91.

M 2:30-4:25. S. L. Gilman and C. A. Martin.

A survey of major late nineteenth- and early twentieth-century works reflecting the adoption of the biological mode as a central metaphor in German thought. Central to the course will be Freud's early work (*Studies in Hysteria*, *Interpretation of Dreams*, *Three Essays*). Other writers to be read include Nietzsche, Haeckel, Andreas-Salomé, Wedekind, Hauptmann, Schnitzler, and Lombroso.]

**[638 Nineteenth-Century Poetry**

Not offered 1990-91.]

**[639 German Poetry of the Twentieth Century**

Spring. 4 credits. Not offered 1990-91.

R 3:35-5:30. L. M. Olschner.

The seminar will focus on the readings of exemplary poetic and theoretical texts. George, Hofmannsthal, and especially Rilke will provide the foundation on which aspects of tradition, modernism, avant-gardism, and hermeticism can be defined and differentiated. Expressionism, Dada, Surrealism, traditional and recent nature poetry, political poetry from the right and left, Holocaust poetry, poetry of *Innerlichkeit*, and concrete poetry are the areas of primary interest.]

**[641 The Modern German Novel**

Not offered 1990-91.]

**[642 Bertolt Brecht in Context (also Comparative Literature 679 and Theatre Arts 679)**

Spring. 4 credits. Requirements: seminar paper that will form the basis for an oral presentation for class discussion. Not offered 1990-91.

M 2:30-4:25. D. Bathrick.

Brecht's theory and dramatic praxis will be examined in the light of a two-fold context: (1) the relation of selected plays and writings to the historical contingencies of the Weimar and exile periods in which they emerged; (2) in later periods: an analysis of the reception and various readings of these same works by later writers and critical publics in West Germany, East Germany, and the United States as a way of understanding the changing nature of aesthetic values in the postwar period. Special attention will be given to the importance of Marxism for Brecht's art, as well as to the author's role as a representative of the cultural avant-garde.]

**[643 Mann and Myth**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

M 1:25-3:20. I. Ezergailis.

An examination of Thomas Mann's use of mythical (including biblical) sources and traditions, centering on a reading of the Joseph-tetralogy and the correspondence between Mann and Karl Kerényi.]

**[644 The Holocaust Survivor as Author (also Near Eastern Studies 444)**

For description, see German Studies 444. Not offered 1990-91.]

**[645 West German Literature, 1945-1970**

Spring. 4 credits. Open to advanced undergraduates with permission of instructor. Taught in German. Not offered 1990-91.

W 1:25-3:20. L. M. Olschner.

The seminar will emphasize source texts of all genres and analyze the cultural and political background leading to the production of texts that may be read as mimetic echos or critical reactions to the emergence of postwar West Germany. The twenty-year history of the *Gruppe 47* will provide the central frame of reference. The dubiousness or validity of terms such as *Nullpunkt*, *Kahlschlag*, and *Trümmerliteratur*, the function, significance, and history of literary magazines in the late forties and fifties, attitudes and presuppositions of literary critics; the problem of *Vergangenheitsbewältigung*, and the role of literature in the public sphere are background areas that will add to an understanding of primary texts. Within this context the positions of Benn and E. Jünger will be examined, and paradigmatic texts by Böll, Grass, Johnson, Weiss, En-

zensberger, and others will be interpreted in close readings.]

**[646 East German Novel of the Seventies and Eighties**

Fall. 4 credits. Not offered 1990-91.

T 3:35-5:30. D. Bathrick.

The course will explore the thematic and formal developments of the novel in the GDR since the publication of Christa Wolf's *Nachdenken über Christa T.* (1968) in the light of radically changing cultural and political norms (women, dissent, Jewish question, "subjectivity," socialist realism, etc.) in the society as a whole.]

**[647 Paul Celan in Tradition and Context**

Spring. 4 credits. Open to qualified undergraduates with permission of instructor. Not offered 1990-91.

W 3:35-5:30. L. M. Olschner.

Paul Celan, now widely recognized as one of the most important European poets in this century, has complex origins: belonging to the Ashkenazim in Rumania, who spoke German at home, Celan never lived in a German-speaking environment after moving to Paris in 1948. Having lost his parents in a concentration camp, he lived the fractured existence of writing in the language of the murderers. The seminar examines Celan's cultural background in Czernowitz and his indebtedness to romanticism, symbolism, and Surrealism; the context of the Cabala and the Holocaust; intertextual connections with Hölderlin, Rilke, and Mandelstam, as well as dialogues with Heidegger, Benn, and N. Sachs; his translations from seven languages; and poetics and the reception of his poetry, especially in the conservative climate of the Federal Republic of Germany.]

**[648 East and West German Drama: Post-1945 (also Theatre Arts 438/648)**

For description, see German Studies 438. Not offered 1990-91.]

**[649 Contemporary German Women Writers**

Not offered 1990-91.]

**[650 Culture in the Weimar Period (also Theatre Arts 650)**

Spring. 4 credits. Not offered 1990-91.

T 3:35-5:30. D. Bathrick.

This survey course will treat major developments in the area of German culture (literature, cinema, painting) between 1900 and 1933. Individual representative texts will be studied and discussed in their relation to the cultural, political, and social contexts out of which they emerge. Lectures and discussions will focus both on detailed interpretation of individual works as well as on the general historical background and developments of the period.]



**660 Visual Ideology (also Comparative Literature 660 and Theatre Arts 660)**

Spring. 4 credits.

R 3:35–5:30. G. Waite.

Some of the most powerful approaches to visual practices have come from outside or from the peripheries of the institution of art history and criticism. This seminar will analyze the interactions between academically sanctioned disciplines (such as iconography and connoisseurship) and innovations coming from philosophy, psychoanalysis, historiography, sociology, literary theory, mass media criticism, feminism, and Marxism. We will try especially to develop: (1) a general theory of "visual ideology" (the gender, social, racial, and class determinations on the production, consumption, and appropriation of visual artifacts under modern and postmodern conditions); and (2) a specific practice of the "dialectical image" to articulate these determinations. Readings taken from Althusser, Barthes, Bataille, Baxandall, J. Berger, Benjamin, Brecht, Burgin, De Lauretis, Derrida, Eisenstein, Foucault, Freud, Fried, C. Ginzburg, D. Harvey, Heartfield, Irigary, Kristeva, Lacan, Maravall, Marin, Merleau-Ponty, Modleski, Panofsky, Pasolini, M. Raphael, Sontag, Warburg, P. Weiss. Examples will be drawn primarily from the history of oil painting, but also (according to the interests of the class) from architecture, city planning, photography, film, and other mass media.

**664 Late Nineteenth Century: *Fin de Siècle***

Fall. 4 credits.

W 1:25–3:20. C. A. Martin.

The seminar/anchor course will focus on late-nineteenth-century literary, cultural, and social texts, with emphasis on the period between 1880 and 1910. Course will pay particular attention to the meanings and effects of "Naturalism," as well as to the literary-cultural production and debates over "the social question," "the Jewish question," and "the woman question." Readings will be taken from authors such as Nietzsche, Freud, Hauptmann, Ibsen, Salomé, Rilke, Dohm, Wedekind, Schnitzler, Haackel, and von Reventlow. Critical literature will include writings of a range of contemporary critics.

**[665 The Search for German Cultural Identity, 1850–1920]**

Spring. 4 credits. Not offered 1990–91.

T 3:35–5:30. P. U. Hohendahl.

The seminar will concentrate on the period between the Revolution of 1848 and World War I, emphasizing the discourse on German national identity. The texts will be drawn from various areas, including history, music criticism, philosophy, and literature. Authors to be considered are Heine, Wagner, Nietzsche, and Thomas and Heinrich Mann.]

**[674 Opera (also Music 274/674 and Italian 374)]**

Not offered 1990–91.

For description, see German Studies 374.]

**[676 New German Cinema (also Theatre Arts 676)]**

Spring. 4 credits. Not offered 1990–91.

T R 11:40–12:55; screening, T 4:30.

D. Bathrick.

The course will examine in depth major films and filmmakers who are considered a part of the German new wave cinema (Fassbinder, Schlöndorff, Von Trotta, Kluge, Sander, Herzog, Wenders, etc.). Of special interest will be the differing impact of these films in the

contexts of West Germany, Europe, and the United States.]

**[677 Mozart (also Music 677)]**

Fall. 4 credits. Not offered 1990–91.

T 1:25–4. N. Zaslaw.]

**[678 Theory and Practice of Modern Drama (also Theatre Arts 678)]**

Spring. 4 credits. Not offered 1990–91.

W 3:35–5:30. D. Bathrick.

The course will explore different theories of modern drama (Szondi, Brecht, Artaud, etc.) and discuss these on the basis of a number of representative works of modern drama. The point will be to trace the interchange between theory formation and dramatic practice.]

**[679 Bertolt Brecht in Context (also Comparative Literature 679 and Theatre Arts 679)]**

Spring. 4 credits. Requirements: seminar paper that will form the basis for an oral presentation for class discussion. Not offered 1990–91.

M 2:30–4:25. D. Bathrick.

Brecht's theory and dramatic praxis will be examined in the light of a two-fold context: (1) the relation of selected plays and writings to the historical contingencies of the Weimar and exile periods in which they emerged; (2) in later periods: an analysis of the reception and various readings of these same works by later writers and critical publics in West Germany, East Germany, and the United States as a way of understanding the changing nature of aesthetic values in the postwar period. Special attention will be given to the importance of Marxism for Brecht's art, as well as to the author's role as a representative of the cultural avant-garde.]

**[684 Heidegger: A Reading of *Being and Time*]**

Not offered 1990–91.]

**[685 Gramsci and Cultural Politics (also Comparative Literature 685 and Government 675)]**

Spring. 4 credits. Not offered 1990–91.

W 1:25–3:20. G. Waite.

The modern transnational-capitalist state rules not only by domination and coercion but by the "noncoercive coercion" of cultural hegemony. What is the proper role of intellectuals (and who and what is an intellectual?) in cultural politics? How do "leftist" cultural critics, theorists, and artists living under late capitalism relate as individuals and collectively to nascent socialist countries? What is the relationship of intellectuals to political parties? We will deal with the political and cultural writings of Antonio Gramsci—whether Gramsci is best understood as a "Western Marxist" or as an extension of Leninist "orthodoxy"—and with the response of critics, artists, and cultural practices to Gramsci's challenge: the neorealist film *La Terra trema*, Griffith's drama *Occupations*, the paintings of Cremonini, Fowles's novel *Daniel Martin*, Pasolini's poem cycle "Ashes for Gramsci," the mass-media analyses of Parenti (*Inventing Reality*) and Kukarkin (*The Passing Age*), the political philosophy of Laclau and Mouffe (*Hegemony and the Socialist Strategy*), the theory and practice of "low-intensity conflict" as developed by the CIA and the NSC, and the cultural theories of Williams (*Marxism and Literature*) and Said (*The World, the Text, and the Critic*.)

**[688 Theodor W. Adorno: Mass Culture and the Avant-Garde (also Comparative Literature 688 and Theatre Arts 688)]**

Fall. 4 credits. Not offered 1990–91.

T 1:25–3:20. P. U. Hohendahl.

In this country Adorno is primarily known for his philosophical writings and his music criticism. His literary criticism and his contributions to aesthetic theory, on the other hand, remain to be discovered. The seminar will explore Adorno's importance for contemporary criticism; it will focus on Adorno's theory of art as well as his literary and music criticism, especially those parts concerned with the avant-garde and its role in the age of modern mass culture. The readings will be taken from Adorno's essays as well as *Minima Moralia*, *Dialectic of Enlightenment*, *Philosophy of Modern Music*, *Prisms*, and *Aesthetic Theory*.]

**[689 Art and Truth: The Aesthetic Theory of Theodor W. Adorno (also Comparative Literature 689)]**

Spring. 4 credits. Not offered 1990–91.

T 1:25–3:20. P. U. Hohendahl.

The seminar will focus on the aesthetic writings of Adorno, beginning with relevant chapters from *Dialectic of Enlightenment*, as well as selected essays on European literature and music. The emphasis then will be placed on Adorno's major posthumous work, *Aesthetic Theory* (1970). The aim is a close reading of Adorno's theory in the context of the Kantian and Hegelian tradition.]

**[690 German Feminist Criticism and Theory (also Women's Studies 690)]**

Spring. 4 credits. Open to qualified undergraduates with permission of instructor. Reading knowledge of German required. Not offered 1990–91.

W 1:25–3:20. C. A. Martin.

This course is designed to explore developments in feminist literary theory with particular attention to the field of German literature. We will consider competing critical strategies and their political implications by working through different readings of specific literary texts and by raising questions about the implications for feminism of competing critical strategies in the general field of literary theory; the tension in feminist *Germanistik* between critical attention to the "male canon" and the construction of a female literary tradition; the impact of French and American feminist work in the field of German; the impact and treatment of the Nazi period; the effects of the East-West divide on development in both Germanys; the impact on feminist literature and criticism of Third World women in Germany; and approaches in West and East Germany to imperialism and racism.]

**[694 Seminar in Literary Theory: Aesthetics of Reception and Reader Response Theory (also Comparative Literature 694)]**

Fall. 4 credits. Not offered 1990–91.

T 1:25–3:20. P. U. Hohendahl.

The interest in the reception of literature and reader response has become a major focus for the development of literary theory since 1970. The seminar will concentrate on the emergence of the aesthetics of reception in both West and East Germany during the late seventies and early eighties. These approaches will be compared with the emerging reader response theory in the United States. The reading material will be taken from the writings of Jauss, Iser, Naumann, Weimann, Stanley Fish, and Norman Holland.]

**[695 Brecht and Artaud (also Comparative Literature 695 and Theatre Arts 695)]**

Fall. 4 credits. Not offered 1990-91.

W 12:20-2:15. D. Bathrick.

This course will explore in depth the writings and practices of two major 20th-century theatrical artists, Bertolt Brecht and Antonin Artaud, to (a) map out differences and similarities between the two as representatives of avant-garde theatre; (b) situate their respective work in the political and cultural contexts out of which they emerged; and (c) explore their impact upon succeeding movements and artists of modern drama and cinema. A central focus of the course will be to explore the differing and changing notions of "avant-garde theatre" as demonstrated in the work and reception of Brecht and Artaud. The face-off between the two will serve methodologically both to delineate and to interrogate critically what have become two discrete "models" of avant-garde theatre as well as to consider ways in which these two models have been and could be synthesized.]

**[697 The Hermeneutic Tradition (also Comparative Literature 497/697)]**

Not offered 1990-91.

For description, see German Studies 497.]

**[699 German Film Theory (also Comparative Literature 699 and Theatre Arts 699)]**

Spring. 4 credits. Not offered 1990-91.

R 1:25-3:20. D. Bathrick.

This course will examine critically the writings of major German film theorists from the Weimar period to the present. Works by Bela Balazs, Rudolf Arnheim, Siegfried Kracauer, Walter Benjamin, Theodor Adorno, Max Horkheimer, Alexander Kluge, H. J. Syberberg, Gertrud Koch, Thomas Elsaesser, and others will be read and discussed in light of the following considerations: What are the aesthetic and philosophical premises underlying these theories? What are the cultural and political contexts out of which these ideas emerge and how are these theories addressing these contexts? How do these theories relate to the work coming out of other national traditions at the same time or to current debates in feminist, formalist, post-modern, or post-structuralist film theory? There will be film showings.]

**753-754 Tutorial in German Literature**

Fall and spring. 1-4 credits per term.

Prerequisite: permission of instructor.

Hours to be arranged. Staff.

**Related Courses in Other Departments**

**German 401: Introduction to Germanic Linguistics**  
Harbert.

**German 406: Runology**  
Harbert.

**German 407: Applied Linguistics: German**  
Kufner.

**German 603: Old High German, Old Saxon**  
Harbert.

**Government 376: Marx**  
S. Buck-Morss.

**Government 669-670: Modern Social Theory**  
S. Buck-Morss.

**Music 287: Mozart**  
N. Zaslaw.

**GOVERNMENT**

V. Shue, chair; B. R. O'G. Anderson, M. G. Bernal, S. Buck-Morss, W. J. Dannhauser, A. T. Dotson, M. J. Esman, B. Ginsberg, M. Goldfield, J. Goldgeier, S. I. Jackson, M. Katzenstein, P. Katzenstein, E. W. Kelley, E. G. Kenworthy, I. Kramnick, R. N. Lebow, T. J. Lowi, W. Mebane, T. J. Pempel, J. Pontusson, J. Rabkin, T. Risse-Kappen, M. Rush, L. Scheinman, M. Shefter, S. G. Tarrow, S. Telhami, N. T. Uphoff, J. Waldron

Government is what Cornell calls a department that elsewhere might be termed political science. The focus of this discipline is power applied to public purposes. Some faculty concentrate on purposes, some on applications. Some engage in the close reading of great texts of political philosophy, while others analyze the behavior of power-wielders and publics in this and other societies. Government is divided into four subfields: U. S. politics, comparative politics (other nations), political theory (philosophy), and international relations (transactions between nations).

To accommodate new courses or course changes, a supplementary announcement is prepared by the department. Before enrolling in courses or registering each term, students are requested to consult the current supplement listing courses in government, available in 125 McGraw Hall.

**The Major**

To be **admitted** to the major, a student must have already received a passing grade in at least three government department courses and received a grade of B or better in at least two such courses.

To **complete** a major in government, a student must (1) pass at least two of the introductory courses and an additional course in one of the remaining government subfields (American Government, Comparative Government, Political Theory, International Relations); (2) accumulate an additional 24 credits of government coursework at the 300-level or above; (3) successfully complete at least one seminar-style course in government (which may be applied toward the 24 credits); (4) accumulate at least 16 credits in related fields, again at the 300 level or above. All courses used to fulfill a government major must be passed with a letter grade. Majors are urged to complete the introductory course requirement early.

Seminars are those courses numbered 400, 490, and 500, plus whatever additional courses the director of undergraduate studies may designate. To be admitted to a seminar, students apply during the course scheduling period held the previous semester. Related fields normally include courses offered by these departments: Anthropology, Economics, History, Psychology, and Sociology. Majors should discuss their selection of related courses with their advisers. When approved by an adviser or by the director of undergraduate studies, courses from still other departments may be used to fulfill this requirement.

**Cornell-in-Washington Program.** Government majors may apply to the Cornell-in-Washington program to take courses and undertake a closely supervised externship during a fall or spring semester.

**European Studies Concentration.** Government majors may elect to group some of their required and optional courses in the area of European studies, drawing from a wide variety of courses in relevant departments. Students are invited to consult Professors P. Katzenstein, Scheinman, and Tarrow for advice on course selection and foreign study programs.

**International Relations Concentration.** See the description under "Special Programs and Interdisciplinary Studies."

**Honors.** Each fall a small number of seniors enter the honors program. To apply, junior majors submit applications in May. Along with a fuller description of the honors program, application forms are available in 125 McGraw Hall. The three courses comprising the honors sequence (honors courses) are described below.

**Introductory Courses**

Students registering for introductory courses should register for the lecture only. Sections will be assigned during the first week of class. Introductory courses are also offered during summer session.

**111 The Government of the United States**

Spring and summer. 3 credits.

B. Ginsberg, T. J. Lowi.

An introduction to government through the American experience. Concentration on analysis of the institutions of government and politics as mechanisms of social control.

**131 Introduction to Comparative Government and Politics**

Fall and summer. 3 credits.

M. J. Esman.

A survey of the institutions, processes, and major problems of politics and government in contemporary states. The structures and ideologies of different regimes, the relationships of individuals and groups to the state, the shaping and implementation of public policy, the regulation of political conflict, and the adaptation of political systems to changing conditions. Particular attention is paid to the government and politics in Great Britain, France, the Soviet Union, China, Nigeria, and Mexico.

**161 Introduction to Political Theory**

Spring and summer. 3 credits.

W. J. Dannhauser.

A survey of the development of Western political theory from Plato to the present. Readings from the works of the major theorists. An examination of the relevance of their ideas to contemporary politics.

**181 Introduction to International Relations**

Fall and summer. 3 credits.

P. Katzenstein.

An introduction to the basic concepts and practice of international politics.

**Freshman Writing Seminars****100 Freshman Seminars**

Fall, spring, or summer. 3 credits. Seminars will be offered in fall, spring, and summer terms. Consult the listings for the Freshman Seminar Program in the section "Special Programs and Interdisciplinary Studies," the supplement issued by the department, and the Freshman Seminar booklet for course descriptions and instructors.

## Major Seminars

### 400 Major Seminars

Fall or spring. 4 credits.

These seminars, emphasizing important controversies in the discipline, cap the majors' experience. Thus preference in admission is given majors over nonmajors and seniors over juniors. Topics and instructors change each semester. To apply, students should pick up a form in 125 McGraw Hall during the course selection period the semester before the seminar is given. The following courses are open to sophomores, juniors, and seniors without prerequisites unless otherwise indicated.

### American Government and Institutions

Government 111 is recommended.

#### 306 Sex Discrimination: Law and Social Policy (also Women's Studies 372 and Sociology 372)

Fall. 4 credits.

C. Bohmer.

This course will cover the current legal and social trends in the area of sex discrimination. The relationship between feminist consciousness and organization and developments in gender-related constitutional law and legislation will be examined. Focusing on such topics as education, employment, gay rights, and reproductive control, the course will analyze the relationship between legal change and sociopolitical change as it affects equal rights.

#### 308 Class, Race, and Interest Groups in U.S. Politics

Fall. 4 credits.

M. Goldfield.

The American polity is often characterized as a democracy, sometimes as a representative democracy, sometimes as a pluralist democracy. While most people recognize the existence of a great deal of corruption, unequal benefits, special advantages to the wealthy, and even the political exclusion of the "poor" and "minorities," these phenomena are usually viewed as aberrations or imperfections that do not fundamentally define either the distribution of power or the democratic functioning of the political process. In this course we will entertain the proposition that issues of class and race are central to the shaping of politics in this country. While the course will spend some time examining the dominant paradigms in U.S. politics, the bulk of our attention will be devoted to more critical readings.

#### [309 Interpretations of American Politics Not offered 1990-91.]

#### 310 Power and Poverty in America

Fall. 4 credits.

E. W. Kelley.

America, despite egalitarian democratic rights, remains a stratified society conspicuous for great disparities in the allocation of income and wealth. The purpose of this class is to investigate these disparities, both empirically and normatively, and to assess the impact of government upon them. Topics for discussion will include: What do we mean by distributional inequality and by the demand for greater egalitarianism? What is the extent of inequality and of poverty in America today? How does one establish minimum standards for distributional justice? Is the United States currently on the road toward achieving that minimum standard? What is the array of federal welfare programs presently available and what is their

effect? How does one understand the role of the welfare state under advanced capitalism and what different forms has it assumed in different countries? How do we explain its particular American manifestation? What reforms are currently on the political agenda? Can we imagine a society somewhat like that in America achieving a very different distributional result?

#### 311 Urban Politics

Spring. 4 credits.

M. Shefter.

The interaction between urban problems and the politics of city government has resulted in important public policy issues in the United States. This course provides an introduction to the politics of metropolitan areas; analysis of the central institutions and processes of urban government such as mayors, city councils, elections, and the criminal justice system; and specific public policy problem areas such as race relations, education, housing, law enforcement, and civil disorder.

#### [312 Urban Affairs Laboratory

4 credits. Not offered 1990-91.]

#### 313 The Nature, Functions, and Limits of Law

Spring. 4 credits.

K. Clermont.

A general education course for students at the sophomore and higher levels. Law is presented not as a body of rules but as a set of varied techniques for resolving conflicts and dealing with social problems. The roles of courts, legislatures, and administrative agencies in the legal process is analyzed, considering also the constitutional limits on their power and practical limits on their effectiveness. Readings consist mainly of judicial and administrative decisions, statutes and rules, and commentaries on the legal process.

#### 316 The American Presidency

Spring. 4 credits.

A. Dotson.

Analysis of the politics of the presidency and the executive branch with emphasis on executive-legislative relations, executive branch policymaking, and the problems of the modern presidency.

#### 317 Campaigns and Elections

Fall. 4 credits. Prerequisite: Government 111 or permission of the instructor.

W. Mebane.

This course examines popular campaigns and elections, focusing primarily on the United States. Topics covered include the effects of election-related manipulations on the economy and vice versa; why members of the U.S. House of Representatives running for reelection almost never lose; how individuals decide whether to vote and, if so, for whom; and why political parties play such minor roles in American electoral campaigns. Among the required assignments is a paper, based on original primary research, in which the results of the 1990 U.S. House and Senate elections are explained.

#### 318 The American Congress

Fall. 4 credits.

M. Shefter.

The role of Congress in the American political system. Topics to be discussed: the political setting within which Congress operates, the structure of Congress, the salient features of the legislative process, and recent congressional behavior in a number of policy areas.

#### 320 Public Opinion and Public Choice

Spring. 4 credits. Prerequisite: Government 111 or permission of the instructor.

W. Mebane.

This course develops the apparent paradox that a government the people control will only rarely be a government that does what the people want. Through a variety of theoretical lenses, but especially that provided by the formal theory of social choice, we examine several of the most important institutions through which people control government in the United States, including elections, legislatures, and bureaucracy. A contrast is systematically developed between the paradoxes evident in how such institutions actually operate and the notions of democratic consensus expressed by the theory of public opinion. A completed paper based on original case study research is among the course assignments.

#### [323 The "Fourth" Branch

4 credits. Not offered 1990-91.]

#### [327 Civil Liberties in the United States

4 credits. Not offered 1990-91.]

#### 328 Constitutional Politics: The United States Supreme Court

Fall and summer. 4 credits.

J. Rabkin.

The course investigates the role of the Supreme Court in American politics and government. It traces the historical development of constitutional doctrine and the institutional role the court has played in American politics.

#### [329 Race, Gender, and Politics

4 credits. Not offered 1990-91.]

#### 353 Feminism, the State, and Public Policy (also Women's Studies 353)

Spring. 4 credits.

M. Katzenstein.

The course examines the aims and strategies of the feminist movement in the United States and the response of both society and the state to feminist claims. It is thus a course about political protest and the capacity of American political institutions to promote and shape as well as to counter social change. In examining the law and public policy on such issues as job discrimination, wife battery, rape, abortion, etc., the course explores the contradictions between, and the congruence of, the dual ideals of individual choice and group equality.

#### [403 Cleavages and Conflicts in Contemporary American Politics

4 credits. Not offered 1990-91.]

**405 Government and the Economy**  
Spring. 4 credits.

E. W. Kelley.

What would Adam Smith and Karl Marx consider the causes of such problems as stagflation, an unfavorable balance of trade, the threat of protectionism, the growth of massive public and private sector bureaucracies, and excessive government regulation? What suggestions would they make about remedies? How can we evaluate both their suggestions and their evidence? Is representative democracy itself part of the problem? Can Woodrow Wilson, Thomas Jefferson, or Grant McConnell help us understand the effects of legislative behavior on economic transactions? This course will use selected works of Smith, Marx, Durkheim, Wilson, and more recent authors such as Mancur Olson, Bendix, and McConnell. Substantive focus will be on classical political economy; the development of the state; the rise of professions, guilds, and labor unions; regulation and the increased delegation of public authority to private groups. Methodological focus will be on the ways of evaluating both discursive and quantitative evidence for the factual and causal claims of the authors read.

**[406 Politics of Education]**  
4 credits. Not offered 1990-91.]**[407 Law, Science, and Public Values]**  
Spring. 4 credits. Not offered 1990-91.]**[411 Political and Economic Power in Cities]**  
4 credits. Not offered 1990-91.]**413/613 Politics and Economics in Local Areas**

Spring. 4 credits.

W. Mebane.

"All politics is local politics," some say. This course gives sustained attention to that proposition. We examine the dependencies that exist in the United States between political outcomes and local economies. Fiscal federalism, the consequences local taxing and spending have for economic growth, the pork barrel, and the effects local economic conditions have on elections are among the topics considered. Theoretical suggestions from economics and regional science are reviewed, along with research from political science. Students are also introduced to a number of recently organized data collections that offer chances for new, systematic research in this area.

**414/614 The Administrative State**  
Fall. 4 credits.

J. Rabkin.

This course will examine the problem of how—or whether—legitimate governmental authority can be distinguished from arbitrary coercion in a modern era of pervasive regulation. It will consider, in turn, several different theoretical approaches to this problem as illustrated in the works of modern legal and social theorists, in some landmark cases in the history of American administrative law, and in a representative sampling of modern cases. But the course will also look at several case studies of the regulatory process in today's world, suggesting the difficulties of applying—or putting much reliance on—these accepted approaches in actual practice.

**418/618 Labor in American Politics**  
Spring. 4 credits.

M. Goldfield.

This seminar will examine a series of questions about the "exceptional" character of American politics. We will first examine various theories about why the United States, in contrast to other economically developed capitalist countries, has no strong working class political party. The emphasis will be on distinguishing a series of plausible hypotheses whose validity can be evaluated. We will then attempt to test these hypotheses by a study of the development of U.S. industrial unions. Our goal will be an adequate explanation of why U.S. labor and American politics are "different."

**420/620 American Political Development**  
Fall. 4 credits.

M. Goldfield.

This course will examine a number of theories of how American politics has developed its distinctive aspects. The first half of the course will be devoted to examining five theories of American political development: 1) Pluralist views (e.g., Hartz) on the distinctive liberal values in U.S. society; 2) state-centered theories that stress the importance of the development of the administrative capacities of the federal government; 3) critical election theories that emphasize the importance of electoral realignments; 4) theories that point to the changes in structure or regimes of capital accumulation; 5) analyses that argue for the centrality of political exclusion and divisions by class, race, and gender. The second half of the course will attempt to evaluate the applicability of these theories to American politics by looking at distinctive features of the period from the New Deal to the present.

**[423 Labor and the New Deal]**  
4 credits. Not offered 1990-91.]**[424 Political Change in the United States]**  
4 credits. Not offered 1990-91.]**428-429 Government and Public Policy: An Introduction to Analysis and Criticism**

428, fall; 429, spring. 4 credits each term. Open to undergraduates. 428 and consent of instructor are required for 429.

T. J. Lowi.

Government 428 concentrates on history and criticism of U.S. policies and the politics associated with them. Particular attention is given to the origins and character of the regulatory state and the welfare state. Government 429 is an opportunity to pursue further the research begun in 428.

**Comparative Government**

Government 131 is recommended.

**[326 Eastern Europe Today: Economics, Government, Culture (also Russian Literature 329 and Economics 329)]**  
4 credits. Not offered 1990-91.]**[330 The Soviet Union: Politics, Economics, and Culture (also Russian Literature 330 and Economics 330)]**  
Spring. 4 credits. Not offered 1990-91.]**[331 Beyond the Year 2000]**  
4 credits. Not offered 1990-91.]**333 Government and Politics of the Soviet Union**

Spring. 4 credits.

L. Bruszt.

The politics of the top leaders, the institutions through which they operate, and the impact of their policies on the Soviet people. Emphasis is also on phases in the development of the Soviet system and on the ways in which the Soviet Union served as the prototype for all subsequent Communist states.

**[334 Business and Labor in Politics]**  
Fall. 4 credits. Not offered 1990-91.]**335 Modern Greek Poetry and Politics (also Comparative Literature 235 and Classics 235)**

Fall. 4 credits.

G. Holst-Warhaft.

The history of modern Greece has been marked by a series of political crises that have resulted in deep divisions within society. Greek poetry has reflected these crises and divisions, and in this course the poetry of 19th- and 20th-century Greece will be interpreted in its historical and political context. The course will concentrate on four periods in which there has been a particularly strong interaction. The continuity of ancient Greek myths in modern Greek poetry will also be explored. Students taking this course as Government 335 for 4 credits must write an additional paper on a political topic.

**[336 The Ethnic Dimension in Politics]**  
4 credits. Not offered 1990-91.]**337 Marxism, Communism, and Revolution**

Spring. 4 credits.

S. Tarrow.

From Marx to Gorbachev, from mid-nineteenth century to the present, and from Western Europe to Asia, Marxism and communism spread rapidly across the globe. For some, Marxism was a beacon of hope and liberation; for others, communism was the evil empire. At one time, communist revolutionaries seemed poised to spread the doctrine of Marxism through violent revolution. This apparent threat created a bipolar world and transformed American foreign policy. More recently, communism has fallen on hard times. Intellectuals, political leaders, and ordinary people in communist countries reject the doctrine of Marxism that once inspired them and now challenge the communist elites who run their countries. What is the theory of Marxism and how did it give rise to such contradictions? How does it relate to the practice of communism today? Can the current turbulence in Eastern and Central Europe be considered a revolution against communism? This course will analyze the appearance of Marxism in Western Europe in the mid-nineteenth century, the meteoric rise and diffusion of communist parties and regimes in the first half of our century, and the fate of Marxism and communism today. Students are encouraged to precede this course by taking Government 131 or 376, or Philosophy 319.

**[338/638 European Political Development]**  
4 credits. Not offered 1990-91.]**[340 Latin American Politics]**  
4 credits. Not offered 1990-91.]**[341 Society and Politics in Central Europe]**  
4 credits. Not offered 1990-91.]



**343 Contemporary European Society and Politics (also History 283 and German Literature 283)**

Fall. 4 credits.

J. Pontusson.

The crisis of communist regimes in Eastern Europe has brought an end to the postwar division of Europe. At the same time, the European Community is emerging as a major economic and political power in the world. This course explores these dramatic new developments against the background of an interdisciplinary and comparative investigation of postwar European politics, society, and culture. Topics include generational change, class structure, economic and social policy, new social movements, family and community life, film, and cultural criticism.

**[344 Government and Politics of Southeast Asia]**

4 credits. Not offered 1990-91.]

**[345 Contemporary European Society and Politics (also German Literature 285 and History 285)]**

4 credits. Not offered 1990-91.]

**346 Politics of Contemporary Japan**

Fall. 4 credits.

T. J. Pempel.

The focus will be on the political, social, and economic delimiters of policymaking in postwar Japan, with some particular attention given to ideological conflict, political parties and elections, the bureaucracy, the consumer movement, student protest, defense policy, and economic penetration of Southeast Asia.

**347 Government and Politics of China**

Fall. 4 credits. No prerequisites.

Jia Quingguo.

An introduction to the main currents in China's domestic politics over the last fifty years. Topics include Maoist philosophy; the Communist Party's revolutionary rise to power; peasants, communes, and village politics; ultra-left socialist idealism and mass mobilization; intra-bureaucratic politics; the conditions for military and industrial modernization; and the recent turn toward "market socialism."

**[348 Politics of Industrial Societies]**

4 credits. Not offered 1990-91.]

**[349 Political Role of the Military]**

4 credits. Not offered 1990-91.]

**[350 Comparative Revolutions]**

4 credits. Not offered 1990-91.]

**351 India: Social and Economic Change in a Democratic Polity**

Spring. 4 credits.

M. Katzenstein.

This course explores the social, economic, and political forces that have shaped India's development since independence. It considers why democratic political institutions in India have proved so resilient and what effect these institutions have on the economic and social policies that are pursued. The importance of international as well as domestic forces in shaping India's economic and political choices is also assessed.

**352 Topics in the Middle East: Islam and the State in the Middle East (also Near Eastern Studies 397)**

Spring. 4 credits.

M. Winter.

The seminar aims to survey and analyze the problematic relationship between Islam and the modern nation-state in the Middle East, against the historical background of the region. The first part of the course will address the pervasive patterns of this relationship. The second part will be devoted to case studies of the various countries in the Middle East: the Arabs and the Palestinian Arabs, Turkey and Iran.

**[354 America in the World Economy]**

4 credits. Not offered 1990-91.]

**[355 Contemporary Revolutions]**

4 credits. Not offered 1990-91.]

**356 Elites and Society: The Political Economy of Power**

Spring. 4 credits.

N. T. Uphoff.

For students who have an interest in the nature and uses of power in politics. Consideration of how power has been treated by earlier political thinkers and by contemporary social scientists. Propositions will be formulated and critiqued about the distribution and consequences of power in America, in other industrialized societies, and in the Third World, and their implications for the making of public policy. A game simulation, Third World Power Play, is undertaken at the end of the course.

**[357 Political Development in Western Europe]**

4 credits. Not offered 1990-91.]

**358 Modern History of the Middle East: Changing Politics, Society, and Ideas (also Near Eastern Studies 294)**

Fall. 4 credits.

M. Winter.

This introductory course is designed to acquaint students with the main political, social, and cultural trends that have shaped the modern and contemporary history of the Middle East. While discussing developments in the region during the nineteenth and twentieth centuries, the lectures will focus on such themes as modernization, nationalism, Islamic response, and Arab politics in the global and regional contexts. The course does not presuppose the knowledge of Middle Eastern languages.

**359 Soviet Foreign Policy**

Spring. 4 credits.

J. Goldgeier.

This course will examine the development of Soviet foreign policy from the Bolshevik Revolution to the present. We will study the influence of culture and history, the effect of changes in the domestic and international systems, and the role of individual leaders in shaping foreign policy. We will be chiefly concerned with understanding how the Soviet Union over time has tried both to change the international system and adapt to it.

**[365 Social Movements and Politics in Industrial Societies]**

4 credits. Not offered 1990-91.]

**[430 The Politics of Productivity: Germany and Japan]**

4 credits. Not offered 1990-91.]

**431 Political Economy of Japan**

Spring. 4 credits.

T. J. Pempel.

This course will focus on the intersection of politics and economics in Japan. It will concentrate on postwar Japan, but will introduce the political economy of Japanese modernization and industrialization during the late nineteenth and early twentieth centuries as background. Included as principal topics will be the political economy of Japanese industrial policy, trade, finance and marketing, as well as more micro-level policies that involve worker management relations, the Japanese firm, technology development, R&D, and women in the workforce. The key concern throughout will be to examine the political causes and consequences of the Japanese economy, with an eye toward situating Japan comparatively as well as isolating certain elements of its uniqueness. Both domestic and international dimensions will be considered.

**[432 Labor and Politics]**

4 credits. Not offered 1990-91.]

**433 Liberal Democratic State Structures**

Fall. 4 credits.

W. Garst.

This course will analyze the emergence of liberal democratic institutions. It will focus on two topics: the conditions that promoted and constrained liberal democratic political development in Europe up to World War II and the recent democratic revolutions in Eastern Europe.

**[434 State and Economy in Advanced Capitalism]**

4 credits. Not offered 1990-91.]

**[435 Collective Action and Politics in Modern Europe (also History 435)]**

4 credits. Not offered 1990-91.]

**[439 Formation of European Nation-States]**

4 credits. Not offered 1990-91.]

**[443/643 Socialism and the Market in China]**

4 credits. Not offered 1990-91.]

**[446 Comparative Communism]**

4 credits. Not offered 1990-91.]

**449 State Institutions and Social Coalitions**

Fall. 4 credits.

T. J. Pempel.

This seminar will focus on macro-historical analysis of states currently considered "advanced industrial democracies." Central to the seminar will be an examination of the formation of different social coalitions, and the ways in which these coalitions have been shaped by and, in turn, have shaped, political institutions. Thus one concern will be the evolution of different types of states—liberal, fascist, corporatist, social welfare, and the like. The seminar will also explore broad policy choices and directions that result from such interactions—guns vs. butter, internationalist vs. domestic economics, public vs. private responsibilities, etc. Finally, it will consider ways in which different regimes respond differently to common international stimuli such as war, recession, territorial aggrandizement, and trade.

**450 U.S. Foreign Policy and Latin America**

Fall. 4 credits.  
R. Rabkin.

Policy toward Latin America is a controversial political issue in the United States. This course will examine policy debates in such areas as national security, political economy, and human rights, along with newer issues such as immigration and drug trafficking. The course will discuss the historical context of U.S. policies toward Latin America, as well as the impact of various influences, such as public opinion, partisan competition, and organized interest groups on the U.S. policymaking process.

**[453 The Fabrication of Ancient Greece, 1780-1880]**

4 credits. Not offered 1990-91.]

**[454 The Herodotean Moment: The Uses and Abuses of "Western Civilization" (also History 454)]**

4 credits. Prerequisite: permission of instructor. Not offered 1990-91.]

**[457 Comparative Public Law: Legal Controls on Government in Europe and America]**

4 credits. Not offered 1990-91.]

**[459 Politics in Contemporary Europe: The Politics of the Left]**

4 credits. Not offered 1990-91.]

**[460 Peasant Politics]**

4 credits. Not offered 1990-91.]

**Political Theory**

Government 161 is recommended.

**360 Ancient Greek Constitutions (also Classics 340)**

Spring. 4 credits. Prerequisite: one of the following: survey of Greek history, a course in Greek civilization, a course in political theory or comparative politics, or permission of instructor.

L. Abel.

The Greek word *politeia* means constitution, but not a single written document. It means the form of political life within a state. This course will survey briefly the variety of forms of political life in ancient Greece from the time of Homer to the classical fourth-century Athenian democracy. The majority of time will be devoted to the history, functioning, and assessment of the Athenian democracy and Athenian law. The second major topic will be the constitutions of Sparta and its role as the oligarchic alternative to democracy. As each constitution is studied, the role of women and ideas of justice within the state will be considered. Required readings will be in translation.

**361 Modern Ideologies: Liberalism and Its Critics**

Fall. 4 credits.  
I. Kramnick.

Since the rise of capitalism, one political ideology has been dominant in the Western world—liberalism. However, its hegemony has been questioned by a series of critics: democracy, socialism, anarchism, conservatism, Freudianism, and feminism. This course will study the tensions between liberalism and these critics and speculate on the possible survival or extinction of this venerable and very American ideology.

**[362 Directions in Feminist Theory (also Women's Studies 365)]**

4 credits. Not offered 1990-91.]

**[363 Classics in Political Thought]**

4 credits. Not offered 1990-91.]

**366 Lesbian Writing and Theory (also Women's Studies 366)**

Spring. 4 credits.  
C. A. Martin.

This course will begin by investigating the histories and implications of the categories in the course title. Though the focus will change from year to year, there will be a strong emphasis on "lesbian writing" and theory since the late 1960s. We will consider the relations between lesbian and gay male writing and theory as well as theory and writing that addresses itself explicitly to the intersections of race, gender, sexuality, and class. Writers, critics, and theorists will include, but not be limited to Audre Lorde, Esther Newton, Mab Segrest, Barbara Smith, Cherrie Moraga, Adrienne Rich, Gloria Anzaldúa, Alison Bechdel, Teresa de Lauretis, Judith Butler, Diana Tuss, Martha Vicinus, Michel Foucault, Allan Bérubé, and Martin Duberman.

**[375 American Political Thought]**

4 credits. Not offered 1990-91.]

**376 Marx**

Fall. 4 credits.  
S. Buck-Morss.

The meaning and contemporary relevance of the central concepts of Marxist theory: dialectics, class, ideology, history, social revolution, the state, the family, imperialism, modes of production, the "iron laws" of capitalism, and the communist goal. Readings in the original texts.

**[379 Freud]**

4 credits. Not offered 1990-91.]

**465 Philosophy of Social Science**

Spring. 4 credits.  
M. Goldfield.

Our investigations in this course will focus on several general questions: Is the scientific study of society (and politics) possible and, if so, in what ways, and, if not, how can one legitimately study it? The first part of the course will examine general philosophers of science, including Hempel, Kuhn, Lakatos, and Miller. The majority of the course will examine issues specific to social science, including historical explanation, functional explanation, rational choice, and theories of interpretation.

**[466 The Repressed Feminine in the Writings of Marx (also Women's Studies 466)]**

4 credits. Not offered 1990-91.]

**[468 The Theory and Politics of Liberal Feminism (also Women's Studies 468)]**

4 credits. Not offered 1990-91.]

**469 Limiting War (also Philosophy 369)**

Fall. 4 credits.  
H. Shue.

Modern states employ or threaten violence not only through conventional war but in various other forms including "low-intensity warfare," chemical and biological warfare, terrorism, and nuclear deterrence. This course critically examines the best arguments about limiting or prohibiting various contemporary means and methods of fighting one's enemies, arguments with conclusions ranging from pacifism to "realism." Have traditional doctrines about just

war been overtaken by 20th-century events and technologies, or is it still possible to provide a reasonable justification for limiting war? If so, how? Special emphasis is given to moral issues about nuclear weapons. Readings include the U.S. Catholic Bishops' Pastoral Letter on Nuclear Deterrence, Just and Unjust Wars, by Walzer, and Nuclear Deterrence, Morality and Realism, by Finnis, Boyle, and Grisez.

**470 From Literary Criticism to Marxist Theory: The Early Georg Lukacs (also German Studies 490 and Comparative Literature 490)**

Fall. 4 credits.  
P. U. Hohendahl.

The writings of the late Lukacs have occasionally obscured the importance of the young Lukacs for the project of Western Marxism and Critical Theory. The seminar will reexamine the beginnings of neo-Marxist theory as it emerges out of the integration of neo-romantic cultural criticism and contemporary social theory (Simmel, Weber). The analysis will focus on Lukacs' seminar texts, especially on *Soul and Form*, *Theory of the Novel*, and *History and Class Consciousness*. The course is designed for advanced undergraduates and graduate students.

**International Relations**

Government 181 is recommended.

**381 The Politics of Defense Spending**

Spring. 4 credits.  
J. Reppy.

An analysis of U.S. military programs and budgets in the post-World War II period. Topics covered will include an overview of the defense budget process, special characteristics of the defense market, behavior of defense firms, and domestic factors shaping the arms race. There will be occasional guest lectures by visitors to the Peace Studies Program.

**[382 Integration in the World System]**

4 credits. Not offered 1990-91.]

**[383 Theories of International Relations]**

4 credits. Not offered 1990-91.]

**[384 War and Peace in the Nuclear Age (also Physics 206)]**

4 credits. Not offered 1990-91.]

**385 Contemporary American Foreign Policy**

Spring. 4 credits.  
S. Telhami.

In this course, we will examine the evolution of American foreign policy since World War II. In part I of the course, we will study the theoretical literature linking international and domestic variables to American foreign policy. In part II, we will explore several cases of American foreign policy, in an attempt to test the utility of the various theoretical approaches. The cases selected pertain primarily to Soviet-American relations and to American responses to social and political change in the Third World.

**[386 Structure and Process in the Global Political Economy]**

Spring. 4 credits. Not offered 1990-91.]

**[387 The United States and Asia]**

4 credits. Not offered 1990-91.]

**388 Modern Anglo-German Political Development**

Fall. 4 credits.

W. Garst.

The purpose of this course is to provide a broad comparative introduction to the political development of modern Germany and Great Britain. In particular, we will address the following questions: What accounts for the greater fragility of democratic institutions in Germany prior to 1945? Why has right-wing free market ideology found greater acceptance in Britain during the 1980s? And how will German national identity change in the wake of the recent upheaval in East Germany?

**389 International Law**

Fall. 4 credits.

L. Scheinman.

Characteristics of international law: its theoretical foundations, principles, processes, and relation to international politics. Emphasis on law-in-action. Attention to both traditional problems (intervention, coercion, and the scope and limits of adjudication) and contemporary trends and processes (arms control, outer space, exploitation of seabed resources, the individual in international law, and cooperative patterns of socioeconomic relations at the global and regional level). Content may vary according to international events.

**[390 Principles of Strategy]**

4 credits. Not offered 1990-91.]

**[391 U.S. National Security Policy]**

4 credits. Not offered 1990-91.]

**[392 International Relations of the Middle East]**

4 credits. Not offered 1990-91.]

**393 War and Peace in Greece and Rome (also History 266)**

Fall. 4 credits.

R. N. Lebow, B. Strauss.

A study of war and peace in the ancient Mediterranean world in light of modern theories of international relations. The course will test the validity of modern theories against ancient models and will ask what the ancient experience can contribute to modern theory and practice. Case studies include the Peloponnesian War, the second Punic War, Alexander's conquests, and the defense of the Roman Empire.

**394 The International System**

Spring. 4 credits.

W. Garst.

This course will explore the historical development of the international system. We will begin with the ancient Greek interstate system, then examine the emergence of the balance of power, sovereignty, and diplomatic institutions in early modern Europe, and finish by comparing Anglo-American hegemony in the world economy. Along the way, we will consider the relevance of selected "great works" of political philosophy for these topics.

**[395 NATO in Crisis? Domestic Politics and Foreign Policies in Western Europe]**

4 credits. Not offered 1990-91.]

**474 Empires and Imperialism in World Politics**

Spring. 4 credits.

W. Garst.

The purpose of this course is to consider various theoretical explanations of the interrelated phenomena of empires and imperialism in different historical contexts. Particular topics examined will include various ancient empires, European imperialism between the sixteenth and twentieth centuries, and the rise and decay of the post-World War II Soviet Empire.

**[478 Accumulation on a World Scale]**

4 credits. Not offered 1990-91.]

**479/679 Dependencia and the State**

Spring. 4 credits.

S. Jackson.

In this course we will examine closely a sampling of the principal theoretical and empirical works that seek to explain the constraints on and possibilities for state action in dependent societies, focusing particularly on those factors arising directly from the location of countries in the global system, including the role of multinational corporations, the World Bank, and military aid.

**[480 Foreign Economic Policies of Advanced Industrial States]**

4 credits. Not offered 1990-91.]

**[481 Foreign Policy of the U.S.S.R.]**

Spring. 4 credits. Not offered 1990-91.]

**[482 Build Up to Build Down? The U.S.-Soviet Arms Race and Arms Control]**

4 credits. Not offered 1990-91.]

**483 The Military and New Technology**

Fall. 4 credits.

J. Reppy

In conventional wisdom, military organizations are seen paradoxically both as inflexible institutions and as proponents and consumers of rapid technological change. In this seminar we will examine changes over time in the attitude of the military toward new technology and analyze competing explanations for these changes. Readings will include Michael Howard, *War and European History*; John Ellis, *The Social History of the Machine Gun*; and Donald MacKenzie, *Inventing Accuracy: An Historical Sociology of Nuclear Missile Guidance*.

**[484 Defense Strategy]**

4 credits. Not offered 1990-91.]

**485 International Political Economy**

Fall. 4 credits.

P. Katzenstein.

This course focuses on the political forces shaping the international economy. It analyzes distinct issues (such as trade investment, energy, and technology transfer) from the perspective of a variety of different theoretical approaches.

**[486 International Security: Soviet Security Policy]**

4 credits. Not offered 1990-91.]

**487 Chinese Foreign Policy**

Fall. 4 credits.

Jia Quingguo.

This course offers a comprehensive review of the Chinese foreign policy: its historical and cultural background, its evolution to date, China's relations with major states and regions, and major factors that have shaped China's foreign policy. It attempts to give students both a general picture of this policy and some in-depth analysis of the complicated and subtle process of its formulation and development.

**[488 Comparative Capitalism]**

4 credits. Not offered 1990-91.]

**[489 International Law and Regime Development]**

4 credits. Not offered 1990-91.]

**[491 Superpower Security and Third World Conflicts]**

4 credits. Not offered 1990-91.]

**Honors Courses**

Each April a limited number of junior majors are admitted to the honors program, their work to begin the following fall. Application forms and a full description of the program may be obtained in 125 McGraw Hall.

**490 Honors Seminar: Research Methods**

Fall. 4 credits. Limited to students admitted to the honors program.

E. W. Kelley.

**494 Honors Thesis Clarification and Research**

Fall. 4 credits. Limited to students who have successfully completed Government 490 or 500 or who are taking 490 concurrently.

Staff.

Each student works individually with a faculty member. The student initiates the tutorial by interesting a faculty member in his or her likely thesis project and by submitting to the director of undergraduate studies a form outlining the general area the thesis will treat and bearing the faculty tutor's signature. This form is due the third week of classes. The tutorial culminates in a ten-to-fifteen-page paper setting forth the central questions to be addressed by the thesis, the state of existing knowledge regarding those questions, and why they matter.

**495 Honors Thesis: Research and Writing**

Spring. 4 credits. Limited to students who have successfully completed Government 494.

Staff.

Students continue the work of the preceding semester typically with the same faculty tutor. Research on the thesis is completed and writing begun. The tutorial culminates in a thesis of some sixty to eighty pages. The grade for the tutorial is determined by the faculty tutor, while the degree of honors (if any) awarded the thesis is decided by a committee of faculty members established for that purpose.

## Supervised Study

Except under very unusual circumstances, supervised study, Government 499, is open only to government majors doing superior work in the major. The application form may be obtained in 125 McGraw Hall and must be approved by the director of undergraduate studies for credit to be granted. There is no limit established for the total number of credits a government major may take in Government 499 while at Cornell, but he or she may count no more than 4 credits toward fulfillment of the major. Students who want to continue taking the course for more than one semester must select a new theme or subject each semester, and applicants must present a well-defined program of study that cannot be satisfied by taking regular courses. Credit can be given only for work that results in a satisfactory amount of writing. Emphasis is on the capacity to subject a body of related readings to analysis and criticism. Permission of the instructor is required.

### 499 Readings Fall or spring.

1-4 credits.  
Staff.

## Graduate Seminars

Qualified undergraduates are encouraged to apply for seminars listed with 600 course numbers but may only register with the permission of the instructor. Students may consult the supplement that lists graduate courses, available in the department office.

## Field Seminars

### 601 Scope and Methods of Political Analysis

Fall. 4 credits.  
S. Jackson.

This seminar offers an overview of the main problem areas and theoretical orientations in the four subfields of contemporary political analysis: political theory, American politics, comparative politics, and international relations. Selected topics, including questions of research design, are treated through a reading of the best contemporary literature. The broad issues of the philosophy of social science or specific techniques of analysis may also be addressed.

### [602 Field Seminar in Political Methodology

4 credits. Not offered 1990-91.]

### 603 Field Seminar in American Politics

Fall. 4 credits.

T. J. Lowi.

The basic issues and institutions of American government and the various subfields of American politics are introduced. The focus is on substantive information and theoretical analysis and problems of teaching and research.

### [604 Field Seminar in Public Policy

4 credits. Not offered 1990-91.]

### 605 Field Seminar in Comparative Politics

Spring. 4 credits.

T. J. Pempel.

An introduction to selected theoretical problems in the study of comparative politics and to their application in empirical analysis. Basic problems are social class and politics, authority and legitimacy, participation and mobilization, economic development and

democracy, authoritarian and totalitarian politics, corporatism and pluralism, and nation building and political integration.

### 606 Field Seminar in International Relations

Fall. 4 credits.

R. N. Lebow.

A general survey of the literature and propositions of the international relations field. Criteria are developed for judging theoretical propositions and are applied to the major findings. Participants will be expected to do extensive reading in the literature as well as research.

### 607 Field Seminar in Political Thought

Fall. 4 credits.

I. Kramnick.

An introduction to political theory through a reading of selected classics in political thought from Plato to Marx.

## American Government and Institutions

### 613/413 Politics and Economics in Local Areas

Spring. 4 credits.

W. Mebane.

For course description, see American Government and Institutions.

### 614/414 The Administrative State

Fall. 4 credits.

J. Rabkin.

For course description, see American Government and Institutions.

### 618/418 Labor in American Politics

Spring. 4 credits.

M. Goldfield.

For course description, see American Government and Institutions.

### 620/420 American Political Development

Fall. 4 Credits.

M. Goldfield.

For course description, see American Government and Institutions.

### 624 Political Change in the United States

Spring. 4 credits.

M. Shefter.

This seminar analyzes the sources and consequences of major realignments in American politics.

### 625 Models for Research on Politics

Fall. 4 Credits.

W. Mebane.

This practically oriented course examines a number of relationships between model specification and nonexperimental empirical research design. Issues given sustained attention include level-of-analysis problems, problems of dynamics and cross-sections, problems of measurement, and problems of sampling and other case selections. The course is intended for advanced graduate students wrestling with or expecting to wrestle with empirical research proposals. Basic familiarity with research design is assumed, but neither statistical nor mathematical sophistication is required. Students who wish to work at a technically advanced level will not be discouraged from doing so, however.

## Public Policy

### 628 Politics of Technical Decisions I (also Sociology 515, City and Regional Planning 541, Management NBA 686, and Biology and Society 415)

Fall. 4 credits.

P. Edwards.

Political aspects of decision making in technical areas. Drawing from recent risk disputes, we will examine the origins and characteristics of "technical politics," the role of experts in government, and the problem of expertise in a democratic system.

### [629 Politics of Technical Decisions II (also Sociology 516, City and Regional Planning 542, and Management NBA 687)

4 credits. Prerequisite: Government 628 or permission of instructor. Not offered 1990-91.]

## Comparative Government

### [632 Politics and Society in France, Italy, and Britain

4 credits. Not offered 1990-91.]

### [636 Political Development of the European Welfare State

4 credits. Not offered 1990-91.]

### [637 Peasantry, State, and Revolutionary Socialism

4 credits. Not offered 1990-91.]

### [639 Politics of the Soviet Union

4 credits. Not offered 1990-91.]

### 642 The Future of European Security

Spring. 4 credits.

J. Goldgeier.

The processes of change on the European continent are a lens through which we can reexamine many of our concepts about the nature of international relations, drawing both on history and theory as our guide. What lessons can we draw about the pitfalls that may be encountered by studying past attempts at cooperation such as the Concert of Europe and the League of Nations? What do international relations theories about balance-of-power, regimes, and supranational integration, tell us about the requirements for continued stability on the continent? We will examine a number of issues including the role of the superpowers, the nature of alliances, problems of internal stability, arms control, German unification, environmental problems, and the process of European integration.

### [643/443 Socialism and the Market in China

4 credits. Not offered 1990-91.]

### 644 Sociotechnical Aspects of Irrigation (also Agricultural Economics 754, Agricultural Engineering 754, and Rural Sociology 754)

Spring. 2-3 credits.

N. Uphoff, M. Walter, R. Barker, and W. Coward.

Examines irrigated agriculture and its relation to agricultural development. Emphasis on social processes within irrigation systems and interactions with the social setting, including political and administrative aspects. Provides an opportunity to examine systematically the institutional and organizational policy issues associated with the design and operation of systems of irrigated agriculture in developing countries.



**[645 Chinese Politics]**

4 credits. Not offered 1990-91.]

**[647 Political Anthropology: Southeast Asia]**

4 credits. Not offered 1990-91.]

**[648 Political Economy of Change: Rural Development in the Third World]**

Fall. 4 credits.

N. T. Uphoff.

The seminar analyzes strategies for economic, social, and political change, using an approach that integrates economic, social, and political factors into a common framework dealing with policy choices and political action. Attention focuses particularly on developing local capacities for initiative and implementation with broader participation from rural communities.

**[649 State Institutions and Social Coalitions]**

4 credits. Not offered 1990-91.]

**[651 Agrarian Change in South Asia: Politics, Society, and Culture]**

4 credits. Not offered 1990-91.]

**[652 Southeast Asia Seminar: Philippines (also Asian Studies 601)]**

Spring. 4 credits.

B. Anderson.

A broad range of problems are dealt with. The focus this term is on the Philippines.

**[653 The Plural Society Revisited (also Asian Studies 607)]**

4 credits. Not offered 1990-91.]

**[655 Latin American Politics]**

Fall. 4 credits.

E. Kenworthy.

An overview of major issues in the study of contemporary Latin American politics, including recent writing on dependency, authoritarian rule, transitions to democracy, class and the state.

**[656 Comparative Political Economy]**

Fall. 4 credits.

J. Pontusson.

This seminar seeks to specify the issues and analytical premises of comparative political economy as a subfield of political science. It explores the theoretical debates among political scientists doing political economy as well as the relationship of this literature to institutional economics and Marxist political economy. The readings deal primarily with advanced capitalist countries, and special emphasis is placed on Western Europe.

**[658 Indonesia]**

4 credits. Not offered 1990-91.]

**[659 Politics in Western Europe: Transitions to Democracy]**

Fall. 4 credits.

S. Tarrow.

This course will deal with regularities and differences in the causes, processes, conflicts, and outcomes of some nineteenth- and twentieth-century cases of successful and unsuccessful transitions to democracy. Nineteenth-century cases include the gradual transitions to democracy of Britain and the rapid one of France (in 1871). Twentieth-century cases include Scandinavia early in the century; Italy in 1945; other southern European cases in the 1970s; and Poland and/or Hungary in the later 1980s. Students will use the comparative methods to analyze the causes, processes, conflicts, and outcomes of several

transitions (or failed transitions) to democracy in Europe or elsewhere, applying the theoretical perspectives and methodologies examined in the course to their cases.

**[660 Social Movements, Collective Action, and Reform]**

Spring. 4 credits.

S. Tarrow.

This is a research seminar on the relationships among politics, organized social movements, and periods of mass mobilization like those that swept through Western Europe and the U.S. in the 1960s and in Eastern and Central Europe today. The course begins with a theoretical introduction to major approaches to social movements and collective action, concentrating on the factors that induce masses of people to adopt disruptive forms of collective action. It moves from there to a historical section focusing on cycles of protest in the recent and not-so-recent past. It continues with case materials that illustrate a series of theoretical problems in the study of movements and collective action—particularly that of the relations between protest and reform. Students will write term papers on particular cycles of protest and reform.

**[692 The Administration of Agricultural and Rural Development]**

Spring. 4 credits.

N. T. Uphoff, E. Oyer.

The political, bureaucratic, economic, and technical environments of administration for agricultural and rural development; the various functions involved in administration (personnel management, planning, budgeting, economic analysis, information systems); several major tasks (research, extension services, and infrastructure development); and specific problems of integrating activities, interfacing with rural populations, and utilizing external assistance. Intended primarily for persons who expect to have some future responsibilities in agricultural or rural development administration and Third World countries.

**Political Theory****[661 The Political Theory of the American Founding]**

Fall. 4 credits.

I. Kramnick.

This seminar will look at political thought in the American founding generation. It will investigate the ideology of the American revolution as well as the debates over the Constitution. Readings will include John Adams, Tom Paine, Thomas Jefferson, James Madison, *The Federalist Papers*, anti-Federalist Tracts, and Alexander Hamilton. Efforts will be made to place the political thought of the founding period in its broader European context as well as to trace its impact on nineteenth- and twentieth-century American political thought.

**[665 American Political Thought]**

4 credits. Not offered 1990-91.]

**[666 Modern Political Philosophy]**

4 credits. Not offered 1990-91.]

**[669 Modern Social Theory I]**

Fall. 4 credits.

S. Buck-Morss.

Readings vary, but topics are drawn from the traditions of Marx, Weber, Durkheim, the Frankfurt School, and Freud. They include political economy, the transformation to "modernity," ideology as the legitimization of

power, and social institutions as social constraints. The methods of critical theory, structuralism, poststructuralism, and feminism will be considered.

**[670 Modern Social Theory II]**

Spring. 4 credits.

S. Buck-Morss.

Issues raised by neo-Marxism, critical theory, poststructuralism, and feminism.

**[678 Classics in Political Thought: Nietzsche]**

Fall. 4 credits.

W. J. Dannahausen.

An attempt to articulate Nietzsche's political philosophy by way of an examination of his two most political works, *Beyond Good and Evil* and *On the Genealogy of Morals*.

**International Relations****[679/479 Dependencia and the State]**

Spring. 4 credits.

S. Jackson.

For course description, see International Relations.

**[680 International Security]**

Spring. 4 credits.

R. N. Lebow.

The superpowers have possessed nuclear weapons for almost forty years. Even so, there is no consensus about the political utility of these weapons. Some students of strategy argue that nuclear deterrence is the principal reason why World War III has not broken out. Others insist that the competition to acquire ever more sophisticated weapons and with it, the growing insecurity of both superpowers, is likely to be the primary cause of World War III. Opinion also differs about the diverse causes of strategic competition, the definition and meaning of the nuclear balance, the value of nuclear deterrence as a means of protecting third parties, and the relationship between different force structures, strategies, targeting doctrines, and deterrence. We will take up these and other questions in the course of a review of the history of the nuclear arms race and of the most important theoretical literature written about it.

**[682 International Relations of the Middle East (also Near Eastern Studies 682)]**

Spring. 4 credits.

T 1:25-3:20. S. Telhami.

The focus of this seminar will be the contemporary international relations of the Middle East, with special attention paid to patterns of relations among states of the Middle East, and to the international and domestic variables that could account for these patterns. In part I of the seminar, we will study a) the ways in which superpower competition and changing objectives affect the relations of states in the Middle East; b) the extent to which a change in the distribution of political, military, and economic power in the Middle East alter politics in the region; and, c) the impact of domestic variable on the foreign policies of states in the Middle East. In part II, we will examine three major international crises in the Middle East: the Arab-Israeli conflict; the Iran-Iraq conflict; and the crisis in Lebanon.

**[683 Nuclear Arms Control—Theory and Practice]**

4 credits. Not offered 1990-91.]

**[684 Politics of the Arms Race]**

4 credits. Not offered 1990-91.]

### 685 International Political Economy

Fall. 4 credits.

P. Katzenstein.

An exploration into a range of contemporary theories and research topics in the field of international political economy. The seminar will cover different theoretical perspectives and a number of substantive problems.

### [686 International Strategy

4 credits. Not offered 1990-91.]

### Independent Study

This course is *NOT* open to undergraduates. Undergraduates wishing to conduct supervised study should register for Government 499.

### 799 Independent Study

Fall or spring. 4 credits.

Staff.

Government 799 is a course of individualized readings and research for graduate students. Topics, readings, and writing requirements will be designed through consultation between the student and the instructor. Graduate students in government who are looking to use this as an option to fulfill their course requirements should check with their chairs to be certain that the program of study is acceptable for this purpose. Applications must be completed and signed by the instructor and by the chairs of their special committees. They are available from, and must be returned to, the graduate secretary in 125 McGraw Hall.

### GREEK

See Department of Classics.

### HEBREW

See Department of Near Eastern Studies.

### HINDI-URDU

See Modern Languages and Linguistics.

### HISTORY

S. G. Cochran, chair; G. C. Altschuler, D. A. Baugh, S. Blumin, P. R. Dear, T. H. Holloway, C. Holmes, I. V. Hull, P. R. Hyams, J. J. John, M. Kammen, S. L. Kaplan, J. V. Koschmann, D. C. LaCapra, W. F. LaFeber, R. L. Moore, J. M. Najemy (graduate faculty representative, 341 McGraw Hall, 255-6748), M. B. Norton, C. A. Peterson, J. R. Piggott, W. M. Pintner, R. Polenber, W. B. Provine, D. Sabeau, T. Shiraishi, J. H. Silbey, F. Somkin, M. Steinberg, B. Strauss, B. Tierney, D. Usner (director of undergraduate studies, 363 McGraw Hall, 255-6753), M. Washington, J. H. Weiss, L. P. Williams, D. Wyatt

The popularity of history among Cornell students is due to its usefulness as preparation for graduate, professional, or law school and for any career that requires critical thinking and good writing; the reputation of the faculty for scholarship, teaching, and advising; and most of all, the intrinsic interest of the discipline. A wide variety of introductory and advanced courses is offered. The department is

particularly strong in ancient, medieval, and modern European history; in American, Latin American, Chinese, and Southeast Asian history; and in the history of science.

### The Major

To complete the history major, a student must fulfill the requirements listed below:

- 1) Complete the prerequisite requirement by taking either Introduction to Western Civilization (History 151-152) or Introduction to Asian Civilizations (History 190-191) or, alternatively, three courses in European history—one in ancient history; one in medieval, Renaissance, or early modern history; and one in modern history.
- 2) Take history department courses totaling 36 credits (which may include the prerequisite courses) and complete all these courses with a grade of C or better. Of the 36 credits, a minimum of 20 must be taken in courses numbered 250 and above.
- 3) Take a minimum of 8 credits in each of two of the following fields: American, European, Asian, or Latin American history or history of science. Alternatively, a student may elect to take a total of 16 credits in three of these fields. Credits taken to fulfill the prerequisite requirement (see item 1, above) do not count toward this requirement.
- 4) Take at least one course at the advanced (400 or higher) level.
- 5) Take two courses above the elementary level offered by other departments that relate to the student's area of special historical interest. Prospective majors may want to discuss their projected program with the director of undergraduate studies before formally enrolling with the department.

**Honors.** History majors with an overall B+ average in all their history courses are eligible to enroll in History 400, Honors Proseminar, which is normally taken in the junior year or, at the latest, in the fall of the senior year. (Honors candidates are strongly encouraged to take an additional 400-level seminar during their junior year.) Successful completion of the Honors Proseminar is required for graduation with honors in history. A senior honors thesis is also required. Before the beginning of the candidate's senior year, he or she presents in conversation or in writing a thesis proposal to an appropriate member of the faculty of history. The faculty member who approves the proposal ordinarily becomes the thesis supervisor. If because of leaves of absence or other foreseeable causes it will become necessary for the supervisor's task to be taken on for one semester by some other history faculty member, that faculty member should also be consulted; this should occur no later than the fourth week after the beginning of the candidate's senior year.

Honors candidates should register in History 401, Honors Research, with their supervisors. Any exceptions to this must be approved by the Honors Committee. History 401 is a 4-credit course that permits honors candidates to conduct research and to begin writing the honors essay. At the end of the first semester of the senior year, as part of the requirements for History 401, the student will submit to his or her supervisor a ten-to-fifteen page overview,

or, alternatively, a preliminary draft of some part of the thesis along with an outline of the whole and will undergo an oral examination on the broad field of history that the student researched. The examination will be administered by a committee consisting of the student's supervisor and one other department member, who will eventually serve as a reader of the thesis. The committee will then recommend whether the student may proceed to enroll in History 402, Honors Thesis, during the final semester of the senior year. History 402 is a 4-credit course that permits honors candidates to complete the honors essay and to prepare both to defend the essay and to demonstrate their understanding of the ways in which the themes explored in the thesis fit into a larger historical context.

Honors candidates must complete a minimum of 40 credits in history, 8 of which must be History 400 and 402. The completed thesis will be examined by three readers, including the two faculty members who administered the preliminary oral examination.

The text of the honors essay may not exceed sixty pages except by permission of the chair of the honors committee and the student's supervisor. Two copies will be due during the third or fourth week of April. In May each honors candidate will be given an oral examination administered by the supervisor and the First Reader (who is ordinarily the same person as the co-examiner who served at the end of the first senior-year semester.) The examination will focus on the specific issues of the essay as well as the broad field of history in which the student has concentrated his or her research (e.g., Periclean Athens, seventeenth-century science, nineteenth-century America).

To qualify for a Bachelor of Arts degree with honors in history, a student must (1) sustain at least a B+ cumulative average in all history courses and (2) earn at least a cum laude grade on the honors essay and on the oral examination.

Students considering the honors program should consult the department during the second term of their sophomore year or early in their junior year.

### Course Offerings

#### Freshman writing seminars

#### Comparative history

#### History of science

#### American history

#### Latin American history

#### Asian history

#### Ancient European history

#### Medieval, Renaissance, and early modern European history

#### Modern European history

#### Honors and research courses

### Course Numbering System

100-level courses are very general introductory courses (like 151-152, 190-191) and freshman writing seminars.

200-249-level courses are similar to freshman writing seminars, except that there is greater emphasis on subject matter and less on writing.

250–299—level courses have no prerequisites and admit freshmen. They cover a relatively broad geographical area, period of time, or subject.

300–399—level courses may have specified prerequisites or deal with more-specialized subjects than do those numbered 250–299. Admission of freshmen varies from course to course and is indicated in the course descriptions.

400–499 are upper level undergraduate courses.

600–699 and 700–799 are graduate level courses.

## Freshman Writing Seminars

### [104 Communes and Utopias: Alternative Life-Styles in American History]

Not offered 1990–91.

G. C. Altschuler.

This course examines individual and group critiques of American society and experiments with alternative lifestyles. Topics include the Puritans, the Oneida community, the Mormons, Walden, the Ferrer Colony and Modern school, Vedanta monasteries, Walden II, and contemporary communes.]

### [106 Democracy and Education: History of Learning in America]

Fall. 3 credits. Not offered 1990–91.

M W F 11:15. G. C. Altschuler.

A survey of the history of educational thought and institutions from Puritan times to the present, with emphasis on the nineteenth and twentieth centuries. Topics include the family and church as educational institutions, the democratization of education, the emergence of the university, educational testing, and vocational education. John Dewey and progressive education, "alternate education," student radicalism.]

### [107 The Family in American History]

Not offered 1990–91.

M. B. Norton.

An examination of the American family in the context of changing times from the seventeenth century to the present day. Readings include both primary and secondary sources. Students research the past experience of their own families as part of the course.]

### [108 Civil Liberties in the United States]

Spring. 3 credits. Prerequisite: permission of instructor. Not offered 1990–91.

T R 2:30–3:45. R. Polenber.

Freedom of speech and dissent from Jefferson's time to the present, with emphasis on the twentieth century. Topics include Jefferson and Madison; Lincoln and martial law; Holmes, Brandeis, and the Supreme Court; the relocation of Japanese Americans; the cold war and McCarthyism; religious cults and "brain-washing"; censorship and obscenity; John Milton, John Stuart Mill, and the critique of libertarianism.]

### [112 The North Atlantic Community and the Wider World]

Not offered 1990–91.

T. H. Holloway.

The relationship between the attitudes and values of Europeans and the emergence of the global economic and political network since the Age of Discovery. The voyages of exploration, commercial expansion, and the consolidation and dissolution of modern empires are considered. Texts contemporaneous with these periods will be read and discussed to explore ways members of the North Atlantic community have explained and justified their emerging world influence in religious, racial, technological, and cultural terms.]

### [126 Local History: The Smallest History]

Fall or spring.

T R 8:40–9:55. C. Kammen.

In this seminar students will investigate the history of Cornell University. The course will focus on Cornell's place in the history of American education, on Ithaca as the site of a major university, and on the development of the Cornell idea. Highlighted will be the founders, the students, teachers, courses, and activities at Cornell. Readings will be drawn from the documentary history of the University and will also include a host of Cornell authors: Carl Becker, Morris Bishop, Charlotte Conable, K.C. Parsons, E.B. White, and others. Paper assignments will include speculative essays about education and universities, and research topics requiring the use of diaries, manuscripts, and other archival materials.

### [176 Britain and the Second World War]

3 credits. Prerequisite: permission of instructor. Not offered 1990–91.

T 3:35, R 2:30–4:30. D. A. Baugh.

The aim is to uncover the true facts of Britain's conduct and situation from 1936 to 1946. Emphasis is on the fighting on land, sea, and in the air, but preparedness, economic warfare, diplomacy, and imperial power are considered. Topics include the Battle of Britain, the Battle of the Atlantic, and strategic bombing.]

### [192 Japan and the West]

Fall. 3 credits. Prerequisite: permission of instructor. Not offered 1990–91.

J. V. Koschmann.]

### [205 The Growth of Political Democracy in the United States]

Fall. 3 credits. Limited to 14 students.

Prerequisite: permission of instructor. Not offered 1990–91.

T 2:30–4:30. J. H. Silbey.

An examination of the democratization of American political life since the American Revolution. Such topics as the expansion of white, Black, and women's suffrage and the changing concepts of participation and leadership in American politics will be explored. A number of books and documents covering the topic will be read and discussed and several short papers written.]

### [219 Freshman Seminar: History of North American Indians]

Spring. 3 credits. Limited to 18 students. Not offered 1990–91.

D. H. Usner.

This seminar examines major themes in Native American history from colonial times to the present. Discussions will consider the cultural histories of particular tribes as well as the comparative elements of Indian relations with non-Indians.]

## Comparative History

### [274 Foodways: A Social History of Food and Eating]

Spring. 4 credits.

T R 2:55–4:10. S. L. Kaplan.

An interdisciplinary examination of the validity of the adage "man is what he eats." Among the topics: food and nutrition, food and social structure, the politics of food control, food and modernization, taste making, and food in religion and literature. Cases will be drawn widely across space and time, from Pharaoh's Egypt to the 1980s.

### [360 Early Warfare, East and West]

Spring. 4 credits. Not offered 1990–91.]

M W F 1:25. C. A. Peterson.

A study of the principal modes of warfare found both in the East and the West from ancient times up to the eighteenth century. Tactical evolution and the impact of innovations are stressed, but attention is also paid to the general social background and the role of nonmilitary factors.]

### [380 Social History of Western Technology]

Fall. 4 credits. Not offered 1990–91.

For description see History of Science.]

### [393 Images of Humanity in Medieval China (also Society for the Humanities 425)]

Fall. 4 credits. Permission required.

M 2:30–3:30 and W 2:30–4:25.

J. R. McRae and C. A. Peterson.

*Marcham Seminar.* The middle period in China's history, essentially the T'ang and Sung dynasties, feature some of the highest achievements of Chinese civilization. These centuries (the seventh through the thirteenth) are distinguished by the exceptionally high levels of literature, art, religious and secular thought, and proto-scientific development, as well as by fundamental changes in state, society, and the economy. This seminar will explore the China of this age by examining the lives of several representative figures — a politician, a poet, a Buddhist monk, a Taoist priest, an emperor, an empress, a "detective" and others. The aim will be to reconstruct the inner and outer worlds of men and women perhaps not so far removed from ourselves in their basic motivations and daily concerns.

### [405 Population and History]

4 credits. Open to sophomores. Not offered 1990–91.

R 2:30–4:30. S. L. Kaplan.

Seminar format. An examination of the impact of the methodology and findings of demography on historical scholarship and the implication of historical research for the study of population. Focus will be on the relation of population to family and social structure, economic growth, political stability, collective mentality, etc. Readings in European and American history from the Black Plague through the Industrial Revolution.]

### [407 Death in Past Time]

4 credits. Not offered 1990–91.

S. L. Kaplan.

Every culture has felt an urgent need to deal with death to disarm, rationalize, and integrate it by giving it sense. How a culture perceives and propitiates death reveals a great deal about its social and political structure, religious and artistic values, and economic and scientific goals. The nature of death is considered using a wide variety of examples drawn from throughout history.]

**[409 Seminar on Work in Europe and America]**

Fall. 4 credits. Not offered 1990-91.  
W 2:30-4:30. S. L. Kaplan.

A comparative study of the meaning of work in different societies from premodern times to the present. Emphasis on the "representations" of work of the actors themselves who worked, as well as of those who for various critical reasons did not work. The seminar will examine not only ideology but also the organization, practice, and physical place of work. It will explore theory as well as "cases," and draw on anthropological and sociological as well as historical materials.]

**413 The History and Economics of Whaling in North America (also Agricultural Economics 454 and Society for the Humanities 413)**

Spring. 4 credits.

To be arranged. D. Usner, J. Conrad. The whaling industry of nineteenth-century America is a rich source of documents and data describing the people, resources, and technology that contributed to the development of the United States. Social relations, cross-cultural influences, economic motivations, prices, markets, resource dynamics, and technical change will be examined during the rise and fall of this unique American industry.

**432 The City in History**

Spring. 4 credits. Limited to 12 students.

Prerequisite: permission of instructor.

R 2:30-4:30. S. Blumin.

Reading and discussion of classic interpretations of the rise, role, and character of cities in medieval and early-modern Europe, and in modern Europe and America. Further reading on a topic of the student's own choice.

**[451 Lord and Peasant in Europe: A Seminar in Social History]**

4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

S. L. Kaplan.]

**[454 The Herodotean Moment: The Uses and Abuses of "Western Civilization" (also Government 454)]**

Fall. 4 credits. Limited to 20 students.

Prerequisite: permission of instructor. Not offered 1990-91.

TR 1:25-2:40. M. Bernal, J. M. Najemy.

The basic premise of the seminar is that the concept of "Western civilization" is a problematic one in need of critical analysis. The course will examine the historical evolution of the concept as seen in selected moments of actual and perceptual encounter with other civilizations. It will also inquire into the political uses and abuses of the concept, as well as its discursive, psychological, and anthropological dimensions.]

**471 Black Emancipation in Comparative Perspective (also African Studies 471; Society for the Humanities 426)**

Fall. 4 credits. Prerequisite: one course in American, Afro-American, or African history.

T 2:30-4:30. D. Ohadike and M. Washington.

This course will explore the black emancipation experiences in comparative perspective. Primary emphasis will be on Africa and the United States; secondary focus will be the Caribbean and Latin America. The African component will investigate social consequences of emancipation, the transformations accompanying that process and the experiences of former slaves. Perspectives on the

Americans will include the complexities of emancipation, its socio-economic results and the legacy of race relations.

**[476 Documenting the Depression: Film, Literature, and Memory]**

Not offered 1990-91.

For description see Modern European History.]

**[621 Social Memory and the Transformation of Tradition in American Culture]**

For description see American History. Not offered 1990-91.]

**[708 Seminar in the Research on the History of Food]**

Not offered 1990-91.

S. L. Kaplan.]

**History of Science****233 Agriculture, Science, and Society: From Squanto to Biotechnology**

Fall. 4 credits.

TR 12:20-1:10. M. Rossiter.

This course will survey the major themes in the development of agriculture and agribusiness in the United States in the nineteenth and twentieth centuries. These include particular individuals (such as Liberty Hyde Bailey, Luther Burbank, G. W. Carver, Henry A. Wallace, and Norman Borlaug), the rise of government support and institutions (including U.S.D.A. and Cornell), noteworthy events (the Dust Bowl, World War II, and the environmental movement), and the achievements of the recent Green and "Gene" Revolutions.

**281-282 Science in Western Civilization**

281, fall; 282, spring. 4 credits each term.

History 281 is not a prerequisite to 282.

TR 11:40-12:55 plus disc to be arranged.

P. R. Dear.

These courses aim to make comprehensible both to science majors and to students of the humanities the historical structure and development of modern science and to show science as a cultural phenomenon. Changing perceptions of nature and human knowledge from Greek Antiquity to the twentieth century form the framework for current Western views of the world, while the roots of the present-day dominance of "science" as a symbol of progress and modernity lie in an alliance between knowledge of nature and power over nature that took shape in the nineteenth century after a long period of emergence. 281 runs chronologically up to the death of Isaac Newton and focuses on the cultural traditions of Christian Europe and its selective appropriation of a Greek heritage; 282 covers the eighteenth, nineteenth, and early twentieth centuries.

**287 Evolution (also Biological Sciences 207)**

Fall. 3 credits.

TR 10:10-11; disc to be arranged.

W. Provine.

Evolution is the most central concept in biology. This course examines evolution in historical and cultural context. Aims of the course include understanding of the major issues in the history and current status of evolutionary biology, and exploration of the implications of evolution for culture. Issues range from controversies over mechanisms of evolution in natural populations to the conflict between creationists and evolutionists.

**[288 History of Biology (also Biological Sciences 202 and Biology and Society 288)]**

Spring. 3 credits. Prerequisite: one year of introductory biology.

TR 10:10-11:25. W. Provine. Not offered 1990-91.

An examination of the history of biology, emphasizing the interaction of biology and culture. Original writings of biologists constitute the bulk of reading assignments. This course covers the period from Classical antiquity to the present, but primary emphasis is on twentieth-century biology.]

**[380 Social History of Western Technology]**

Fall. 4 credits. Not offered 1990-91.

TR 10:10-11:25, disc to be arranged.  
J. H. Weiss.

Studies in the interaction between technological changes and social changes in Western Europe and America since the eighteenth century. Readings and lectures will deal both with instances of social transformation that accompanied technological changes and with the role of technology in social thought and cultural expression. Special attention to three periods: Britain during the Industrial Revolution, America in the nineteenth century, and America during the Vietnam War.]

**433 Comparative History of Science**

Spring. 4 credits.

W 2:30-4:30. M. Rossiter.

A survey of the major scientific institutions in the United States and in foreign nations, including developing countries. The course covers the period 1660 to the present and gives some attention to who in each country becomes a scientist, who rises to the top, and who emigrates. Weekly readings and a research paper.

**444 Historical Issues of Gender and Science (also Women's Studies 444)**

Spring. 4 credits. Open to sophomores.

M 2:30-4:30. M. W. Rossiter

One-semester survey of women's role in science and engineering from antiquity to the 1980s with special emphasis on the United States in the twentieth century. Readings will include biographies and autobiographies of prominent women scientists, educational writings and other primary sources, and recent historical and sociological studies. By the end of the semester, we shall have attained a broad view of the problems that have faced women entering science and those that still remain.

**[447-448 Seminar in the History of Biology (also Biology and Society 401-402)]**

4 credits. Not offered 1990-91.

T 2:30-4:30. W. Provine.]

**482 The Origins of Modern Science 1500-1700**

Spring. 4 credits.

T 2:30-4:30. P. R. Dear.

A seminar focusing on the changes in the European conception of nature and of human knowledge that created modern science. A new way of perceiving the world, and a new ideology justifying its experimental manipulation, transformed the finite, earth-centered, organic universe of 1500 into the infinite, mechanical universe of Isaac Newton. The course traces these developments above all through the study of primary materials, using the writings of Copernicus, Galileo, Descartes, Newton, and other lesser-known figures to



discover how technical and philosophical innovations emerged from the changing worldview of early modern Europe.

**487 Science, Technology, and Strategy in the Post-Napoleonic World**

Spring. 4 credits.

T 2:30-4:30. L. P. Williams

An examination of the effects of modern science and modern technology on strategy in modern war. Students will be expected to do one major research paper examining, in both historical and technological detail, some aspect of the strategic effects of science and/or technology.

**488 The Golden Age of French Sciences: 1789-1830**

Fall. 4 credits.

T 2:30-4:30. L. P. Williams.

In 1789, Antoine Laurent Lavoisier published his great *Elementary Treatise on Chemistry*, which created modern chemistry. In 1827, Pierre Simon de Laplace died. In between, such great French scientists as Lamarck, Cuvier, Ampere, Poisson, Biot, Bichat, Cabanis, and Pinel did their most important work. This seminar will deal with their original texts.

**680 Seminar in Historiographical Approaches to Science**

Fall. 4 credits.

T 2:30-4:30. P. R. Dear.

Examines philosophical, sociological, and methodological dimensions of recent historiography of science.

**[681 Seminar in the History of Nineteenth-Century Physical Science]**

Fall. 4 credits. Not offered 1990-91.

T 2:30-4:30. L. P. Williams.]

**687 Seminar in the History of Agricultural Sciences**

Fall. 4 credits. Permission of instructor required.

Hours to be arranged. M. Rossiter. Weekly readings and a research paper.

**[781 Advanced Seminar in the History of Nineteenth-Century Physical Science]**

Fall and spring. 4 credits each term. Prerequisite: permission of instructor. Not offered 1990-91.

L. P. Williams.]

**American History**

**101-102 Introduction to American History**

101, fall; 102, spring. Summer. 3 credits each term. 101 is not a prerequisite to 102.

M W F 11:15. G. C. Altschuler.

A survey of U. S. history designed to introduce students to major themes and interpretations. History 101 traces the origins and evolution of the nation through 1865. Topics include Puritanism, the American Revolution, the Constitution, Jacksonian democracy, and the Civil War. History 102 covers the period from the Civil War to the present. Topics include the Reconstruction, the Gilded Age, the world wars, the 1960s, Vietnam, and Watergate.

**208 The Era of Franklin D. Roosevelt**

Fall. 4 credits. Primarily for sophomores.

Prerequisite: permission of instructor.

T R 11:40-12:55. R. Polenber.

The impact of the Great Depression and World War II on American politics, law, and culture.

**[209 Political History of Indians in the United States]**

Fall. 4 credits. Not offered 1990-91.

T 2:30-4:25. D. H. Usner.

An investigation of political organization and change among Native American societies. Discussions and assignments examine forms of tribal government, diplomacy, and warfare, as well as political relations with European colonies and the United States. Specific topics include pan-Indian confederacies, Indian policy, struggles over sovereignty, and Indian strategies of autonomy and resistance.]

**[210 The Supreme Court and Civil Liberties]**

Fall. 4 credits. Primarily for sophomores.

Enrollment limited to 15 students. Prerequisite: permission of instructor. Not offered 1990-91.

T R 2:55-4:10. R. Polenber.

The development of free speech doctrine from the era of Holmes and Brandeis to the present, with special attention to the controversies over such issues as dissent, libel, and censorship.]

**[214 Seminar on American Foreign Policy]**

Fall. 4 credits. Open to freshmen and sophomores. Limited to 14 students; preference will be given to non-history majors. Prerequisite: permission of instructor. Not offered 1990-91.

T 2:30-4:30. W. LaFeber.]

**227 Historical Perspectives on Modern American Sex Roles (also Women's Studies 227)**

Spring. 4 credits. Limited to 20 students. Intended primarily for sophomores.

M 1:25-4:15. M. B. Norton.

A reading and discussion course. The class will begin by examining sex roles in the United States in the 1980s, looking at a variety of sources such as popular magazines and contemporary commentaries. We will then move backwards in time in an attempt to uncover the roots of current attitudes. The students will help determine which topics the class will investigate in detail.

**255 The American Dream**

Fall. 4 credits.

M W F 2:30-3:20. F. Somkin.

The culture of the United States is markedly different from that of the rest of the English-speaking world. What makes Americans distinct? Lacking from the beginning the blood-and-soil amalgam of other peoples, America has been primarily a set of promises: the American Dream. The emphasis of the course will be on the ironic contrast between this vision at its most grandiose and present American realities.

**[256 African-American History, 1945-85]**

Spring. 4 credits. Open to freshmen with permission. Not offered 1990-91.

T R 11:40-12:55. M. Washington.

This course focuses on the history, culture, and literature of African-American people during the post-World War II, civil rights, and revolutionary nationalist period. It is an introductory course that examines key issues, themes, and events in a context of contemporary relevance. Emphasis will be on the historical evolution of the modern Black community, Black-white race relations, and the impact of modern economic and political institutions on Black life and thought. Topics include the impact of the Cold War on Black leaders and the Black press, integration and Black nationalism, the relevance of socialism and internationalism, the status of Black

women, the African-American literary scene, the emergence of Black liberation theology, and the effects of contemporary Black politicization on the total society.]

**[273 Women in American Society, Past and Present]**

Spring. 4 credits. Not offered 1990-91.

M W 10:10; disc, F 10:10 or 12:20.

M. B. Norton.

A survey of women's experiences in America from the seventeenth century to the present. Among the topics to be discussed are women's familial roles, the changing nature of household work, the women's rights movement, employment of women outside the home, racial and ethnic differences in women's experiences, and contemporary feminism.]

**[275 Crime and Punishment: From the Puritans to Mickey Spillane]**

Spring. 4 credits. Not offered 1990-91.

M W F 1:25-2:15. F. Somkin.

A historical investigation of how the American literary imagination has dealt with the way of the transgressor in novels, short stories, plays, and movies. Readings on murder, guilt, and retribution on land and sea, from the frontier to the urban jungle. Emphasis on the intellectual and social context of moral values.]

**276-277 American Indian History**

276, fall; 277, spring. 4 credits each term.

M W 12:20 plus disc F 10:10, 12:20, or 1:25. D. H. Usner.

A survey of North American Indians from the beginning of European contact to the present. Cultural, political, and economic changes experienced by particular societies will be covered. Emphasis will be given to general themes of Indian-white relations, comparative tribal histories, and the role of Native Americans in the overall history of the United States.

**303 African-American Women in Slavery and Freedom**

Spring. 4 credits.

T R 11:40-12:55. M. Washington.

Historical exploration of African-American women from a sociopolitical perspective. Topics include women in africa, slavery and freedom, sexuality, labor, the family, feminism, and racism.

**[307 The Jewish Immigrant Experience]**

Fall. 4 credits. Enrollment limited. Prerequisite: permission of instructor. Not offered 1990-91.

R 2-4. F. Somkin.

In the half century after 1880 several million Eastern European Jews entered the United States with profound cultural consequences for themselves, their descendants, and the dominant Anglo-Saxon capitalist society they encountered here. Through a study of selected fiction and nonfiction materials this course examines what America made of these immigrants and what they made of it.]

**311-312 The Structure of American Political History**

311, fall; 312, spring. 4 credits each term.

M W F 10:10. J. H. Silbey.

311 examines the course of American politics from 1787 to the Civil War, focusing on the nature of decision making, popular and legislative voting behavior, and the role of interest groups, political parties, and political elites in shaping our political history. 312 examines the course of American politics from 1865 to the present.

**[313 U.S. Foreign Relations, 1750-1912]**  
Fall. 4 credits. Open to freshmen with permission of instructor. Not offered 1990-91.  
T R S 11:15 plus optional sec.  
W. LaFeber.

Examines policy and policymakers from Benjamin Franklin to Woodrow Wilson. Emphasis is placed on domestic events that shaped foreign policy.]

**314 History of American Foreign Policy, 1912 to the Present**

Fall. 4 credits. Open to freshmen with permission of instructor.

T R S 11:15 plus disc. W. LaFeber.  
Students examine the emergence of the United States as a world power in the twentieth century. The course focuses on the domestic sources of foreign policy and the assumptions of the major policymakers (Wilson through Reagan). Important themes include the American response to a revolutionary world since 1912, the increasingly dominant role of the president in the making of U. S. foreign policy, and the changing American position in the international economy. A special section, numbered 301.13, offers an additional 2 credits. Open only to juniors and seniors, it is limited to 15 students. This section will meet weekly and provide an opportunity to write supervised papers on U.S. foreign relations, 1912 to the present. Permission is required.

**318 American Constitutional Development**

Spring. 4 credits. Open to freshmen with permission of instructor.

M W 10:10; disc, F 10:10 or 12:20.  
M. B. Norton.

A study of the major themes of the constitutional history of the United States. Among the topics to be considered are the drafting of the Constitution, the Marshall and Taney courts, the constitutional crisis caused by slavery and emancipation, the rise of substantive due process, the expansion of civil rights and liberties for women and men in the twentieth century, and the contemporary court.

**[319 The Frontier in American Thought and Culture]**

4 credits. Not offered 1990-91.

D. H. Usner.

As a kind of place and a cluster of symbols, the West has deeply influenced ideology and intellectual life in the United States. Using fiction, art, popular culture, and social sciences as primary texts, this course examines how concepts about race and class, society and environment, national destiny and development were fused into various forms of a frontier mythology.]

**321 The Origins of American Civilization**

Spring. 4 credits.

M W F 1:25-2:15. M. Kammen.

The colonial genesis of American culture and society, with emphasis on the emergence of distinctive institutions, attitudes, and social patterns. Topics include race relations, religion, politics, movements of protest, and cultural developments. Open to qualified freshmen.

**325 Age of the American Revolution, 1763-1815**

Fall. 4 credits. Open to freshmen with permission of instructor.

T R 10:10-11:25. M. B. Norton.

An examination of the process by which the thirteen English colonies became an independent and united nation, with emphasis on

political thought and practice, social and economic change, and cultural development. Attention will be paid to the impact of the American Revolution on women, Blacks, and Indians as well as on white males.

**[327-328 American Frontier History]**

327, fall; 328, spring. 4 credits each term. Not offered 1990-91.

D. H. Usner.

Survey of exploration, settlement, and expansion across North America since the sixteenth century. The first term covers international rivalry over territory, frontier trade systems, Indian-colonial relations, and the early administration of U. S. territories. Topics in the second term include the evolution of land and Indian policies, life in frontier communities, and political movements and economic change in the American West.]

**[330 The United States in the Middle Period, 1815-1850]**

Fall. 4 credits. Not offered 1990-91; next offered 1991-92.

M W F 10:10. J. H. Silbey.

An analysis of American society from the end of the second war with England to the crisis of 1850, stressing the developing trends of nationalism and sectionalism, the rise and results of Jacksonian democracy, and the internal tensions produced by physical growth and slavery.]

**[331 The American Civil War and Reconstruction]**

Spring. 4 credits. Not offered 1990-91.

M W F 10:10. J. H. Silbey.

An analysis of the factors leading up to the breakup of the Union, the impact of the war in North and South, and the problems of restoration and reconstruction of the seceded states.]

**332-334 The Urbanization of American Society**

332, fall; 334, spring. 4 credits each term. 332 is not prerequisite to 334.

M W F 11:15 and disc F 10:10 or 11:15.

S. Blumin.

America was born in the country and moved to the city. This course examines the profound effects on American society of the growth and multiplication of cities and of the massive transfer of population from rural to urban and suburban milieus. It is also a history of the city itself, from the small, preindustrial ports of the initial European settlements to the industrial metropolises and urban corridors of the present. Fall term, 1600-1860; spring term, 1860-present.

**333 U.S. Politics and Foreign Policy since 1945**

Fall. 2 credits.

T or R 10:10-11:25. G. McGovern.

An examination of the major issues, domestic political conditions, and historical forces that have shaped American foreign policy from the end of World War II until the present time. Special attention will be given to the cold war as a central factor in U.S. foreign relations.

**335 African-American History from Slavery to Freedom**

Fall. 4 credits.

T R 11:40-12:55. M. Washington.

Introductory course on African-Americans from 1619 to 1865. Emphasis will be on life in bondage, the free black communities, and racism. Other topics include African cultural heritage, the slave trade, religion, the family, and the black freedom struggle.

**[336 The Business of America: Capitalism and Society in the United States, 1776-1900.]**

Fall. 4 credits. Not offered 1990-91.

M W 11:15 plus disc to be arranged.  
S. Blumin.

An examination of capitalism as a developing economic system, and as a force that shaped American society in the most crucial ways. Beginning in the pre-industrial, predominantly rural era of the American Revolution, we will trace the emergence and development of industrial and corporate institutions, the changing social experiences of working, middle, and upper classes, and the evolving ethos of "free enterprise" in the competitive society of the nineteenth century.]

**[337 The Industrial Transformation of American Society, 1865-1900]**

Spring. 4 credits. Not offered 1990-91.

M W 11:15 plus disc to be arranged.  
S. Blumin.

A history of American society since the Civil War, with emphasis on the transforming effects of industrial development, urbanization, large-scale foreign immigration, and new technologies of transportation and communication, on the social lives of "anonymous Americans."]

**[340 Recent American History, 1917 to 1945]**

Fall. 4 credits. Not offered 1990-91.]

T R 12:20-1:10; disc to be arranged.  
R. Polenberg.

Topics include civil liberties and dissent in World War I; individualism and conformity in the 1920s; radicalism and reform in the New Deal; class, race, and ethnicity; Franklin Roosevelt and World War II; the Holocaust; and the atomic age.]

**341 Recent American History, 1945 to the Present**

Spring. 4 credits.

T R 12:20-1:10; plus disc to be arranged.  
R. Polenberg.

Topics include the Cold War and civil liberties; the Supreme Court and civil rights; Kennedy, Johnson, and social reform; the Vietnam War; the Carter and Reagan presidencies; and class, race, and ethnicity in modern America.

**[344 American Ideas from the Puritans to Darwin]**

4 credits. Not offered 1990-91.

M W F 1:25. F. Somkin.]

**345 The Modernization of the American Mind**

Fall. 4 credits.

M W F 12:20-1:10; disc to be arranged.  
R. L. Moore.

American thought and culture from 1890 to the present. Emphasizes the intellectual impact of major political and economic events and the adaptation of social ideas and values to new conditions.

**346 Religion and the Cultural Life of Nineteenth-Century Americans**

Spring. 4 credits.

T R 11:40-12:55. R. L. Moore.

An examination of religion as a basic component of popular cultures. The emphasis is not on churches but on how religious attitudes reached beyond formal organizations to shape the ways in which various American ethnic and racial groups organized, understood, and enjoyed their lives.

**411 Undergraduate Seminar in American Political History**

Fall. 4 credits. Prerequisite: permission of instructor.

M 2:30-4:30. J. H. Silbey.

Topic for 1990-91: The Elections of 1990 and the American Political Tradition.

**414 Motivation of American Foreign Policy**

Fall. 4 credits. Prerequisite: Permission of instructor.

R 2:30-4:15. W. LaFeber.

Topic to be announced.

**[415 The United States and Russia, 1780 to 1914]**

Fall. 4 credits. Enrollment limited to 16 students. Primarily for juniors and seniors. Prerequisite: permission of instructor. Not offered 1990-91.

R 2:30-4:15. W. LaFeber.

The course will analyze diplomatic relations between the United States and Russia between 1780 and 1914. Special attention will be given to the causes of the friendship of the early decades and why it changed to animosity. The domestic origins of the foreign policies of both nations will be stressed. Extensive individual research projects will be assigned.]

**[416 Six Americans]**

Spring. 4 credits. Not offered 1990-91.

R 2-4. F. Somkin.

A study of the lives and ideas of John Adams, Joseph Smith, Mark Twain, Jane Addams, Louis Sullivan, and Oliver Wendell Holmes, Jr., emphasizing the relation of personality to intellect within the context of dominant American ideals.]

**[418 Undergraduate Seminar in the History of the American South]**

Spring. 4 credits. Prerequisite: permission of instructor.

M 2:30. J. H. Silbey. Not offered 1990-91.]

**[419 Seminar in American Social History]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

R 2:30-4:30. S. Blumin.]

**421 American Collective Memory in Comparative Perspective**

Spring. 4 credits. Prerequisite: permission of instructor.

T 2:30-4:30. M. Kammen.

Every society has traditions and myths concerning its evolution and identity. The focus of this seminar will be to examine the role of tradition and memory in the United States—in comparative perspective. The so-called "problem of American exceptionalism" will be explored in depth.

**[426 Undergraduate Seminar in Early American History]**

Spring. 4 credits. Not offered 1990-91.

M 1:25-3:20. M. B. Norton.]

**428 Undergraduate Seminar in American Frontier History**

Fall. 4 credits.

M 2:30-4:30. D. H. Usner.

Topic: The new environmental history.

**[429 Undergraduate Seminar in Indians of Eastern North America]**

4 credits. Not offered 1990-91.

D. H. Usner.

A seminar examining the history of Native Americans in the eastern woodlands from colonial times to the present. The cultural and

economic participation of Indians in the evolution of frontier societies will be examined. Major topics include fur-trade networks, political relations, removal, and the persistence of Indian communities in eastern states.]

**430 Undergraduate Seminar in Law and Authority in American Life**

Fall. 4 credits. Limited to seniors (any field) with 3.0 GPA or higher. Prerequisite: permission of instructor.

T 2:00-4:30. F. Somkin.

Ours is a highly legalistic society, probably having more laws, rulings, hearings, re-hearings, trials, re-trials, appeals, decisions, and lawyers than any civilization in history. At the same time we are accustomed to a level of social violence known elsewhere only in the most murderously lawless environments. Obviously, a suffocating legalism and lives that are nasty, brutish, and short may coexist in an atmosphere of self-congratulation about the blessings of liberty. This course examines the nature of our legal system and its characteristic style of reasoning, with their underlying assumptions, myths, and illusions.

**[439 Undergraduate Seminar in Reconstruction and the New South]**

Fall. 4 credits. Prerequisite: senior standing (in history) or permission of instructor.

T 2:30-4:30. M. Washington. Not offered 1990-91.

This course focuses on the American South in the nineteenth century as it made the transition from Reconstruction to new forms of social organization and patterns of race relations. Reconstruction will be considered from a sociopolitical perspective, concentrating on the experiences of the freedpeople. The New South emphasis will include topics on labor relations, economic and political changes, new cultural alliances, the rise of agrarianism, and legalization of Jim Crow.]

**440 Undergraduate Seminar in Recent American History**

Fall. 4 credits. Prerequisite: permission of instructor.

T R 2:55-4:10. R. Polenberg.

Topic: Benjamin N. Cardozo and the Supreme Court.

**442 Popular Culture in the United States**

Fall. 4 credits. Prerequisite: one year of course work in American history.

W 2:30-4:30. R. L. Moore.

A reading and research seminar concerned with popular culture in nineteenth-century America (publications, performances, and audiences).

**471 Black Emancipation in Comparative Perspective (Marcham Seminar: also Africana Studies 471; Soc Hum 426)**

For description see Comparative History.

**610 Afro-American Historiography**

Spring. 4 credits.

T 2:30-5:30. M. Washington.

Reading and discussion course focusing on the way historians write and interpret the Black experience in America. Students will be concerned with individual historians, various schools of thought, and historical approaches.

**[613-614 Seminar on American Diplomatic History]**

613, fall; 614, spring. 4 credits each term.

Prerequisite: permission of instructor. Not offered 1990-91.

R 2:30-4:15. W. LaFeber.]

**[615-616 Seminar in American Cultural and Intellectual History]**

615, fall; 616, spring. 4 credits.

F. Somkin. Not offered 1990-91.]

**[617-618 Seminar in Recent American Cultural History]**

617, fall; 618, spring. 4 credits each term. Not offered 1990-91.

W 2:30-4:30. R. L. Moore.

A reading and research seminar concerned with popular culture in nineteenth-century America (publications, performances, and audiences.)

**[619 Seminar in American Social History]**

Fall. 4 credits. Not offered 1990-91.

R 2:30-4:30. S. Blumin.]

**620 Seminar in American History**

Fall. 4 credits.

R 3:30-6. M. Kammen.

This is a reading colloquium that will cover topics ranging from the seventeenth to the twentieth century. Emphasis on cultural, social, and political history, however, especially from the early republic to the present.

**[621 Social Memory and the Transformation of Tradition in American Culture]**

Fall. 4 credits. Not offered 1990-91.

M. Kammen.]

**624 Graduate Seminar in American Indian History**

Fall. 4 credits.

Hours to be arranged. D. H. Usner.

**[626 Graduate Seminar in the History of American Women]**

Fall. 4 credits. Not offered 1990-91.

T 2:30-4:30. M. B. Norton.

A reading and research seminar intended primarily for graduate students. Major works in American women's history will be carefully scrutinized, and each student will prepare a lengthy research paper.]

**627 Graduate Seminar in Early American History**

Fall. 4 credits.

T 2:30-4:30. M. B. Norton.

A reading course that will focus on influential and interesting books in colonial American history published in the past fifteen years. Authors include Edmund S. Morgan, Christine Heynman, Rhys Isaac, Carol Karlsen, Alfred Crosby, D. W. Meinig, Mechal Sobel, and William Cronon.

**[633 Seminar in Nineteenth-Century American History]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

M 2-4. J. H. Silbey.]

**[634 Seminar in Nineteenth-Century American History]**

Spring. 4 credits. Not offered 1990-91.

J. Silbey.]

**640 Graduate Seminar in Recent American History**

Spring. 4 credits. Prerequisite: permission of instructor.

Hours to be announced. R. Polenberg.

**710 Colloquium in American History**

Spring. 4 credits. Required of all first-year American history graduate students.

M 2:30-4:30. J. Silbey.

Examination of the major themes, epochs, and interpretations of American history.

## Latin American History

### 295 Colonial Latin America

Fall. 4 credits.

M W F 10:10. T. H. Holloway.

Survey of Latin America from the rise of pre-Columbian civilizations through the European conquest, the establishment of the Spanish and Portuguese colonial societies, imperial rivalries in the New World, the background of the independence movements, and the achievement of political independence.

### 296 Latin America in the Modern Age

Spring. 4 credits.

M W F 10:10. T. Holloway.

Survey of the Latin American nations from independence to the present. Major themes include the persistence of neocolonial economic and social institutions, the development of nationalist and populist politics, revolutionary movements of the twentieth century, and United States-Latin American relations.

### [347 Agrarian Societies in Latin American History

Fall. 4 credits. Not offered 1990-91.

T R 10:10-11:25. T. H. Holloway.

The development of rural patterns of wealth, status, and power, focusing on the role of country people in the larger society. Topics include disruption of the conquest, evolution from encomienda to hacienda, rise of plantation agriculture and export enclaves, decline of Indian communities, peasant protest, and land reform and development programs of the recent past.]

### 348 Contemporary Brazil

Fall. 4 credits.

T R 10:10-11:25. T. H. Holloway.

With some historical background, the course focuses on the twentieth century. Topics include the export-led growth model, contradictions leading to military rule 1964-1985, transition to competitive politics, debt, ecology, regional and social disparities. Some comparisons are made to other Latin American countries.

### 449 Undergraduate Seminar in Latin American History

Spring. 4 credits. Prerequisite: permission of instructor.

M 2:30-4:25. T. H. Holloway.

Topic: History of Central America.

### [649 Seminar in Latin American History

Not offered 1990-91.

T. H. Holloway.]

## Asian History

### 190 Introduction to Asian Civilizations

Spring. 4 credits.

W F 11:15; disc, M 11:15, 12:20, or 2:30.

J. R. Piggott, D. K. Wyatt.

An introduction to the distinctive cultures of China, India, Japan, and Southeast Asia that features an intensive examination of selected topics and periods of particular significance in the history of each.

### 191 Introduction to Asian Civilizations in the Modern Period

Fall. 4 credits.

W F 11:15; disc, M 11:15, 1:25, or 2:30. S. Cochran, D. K. Wyatt.

The history of Asian civilizations in modern times is introduced, focusing on the relationship between key figures and societies. English translations of autobiographies, novels,

short stories, diaries, and other documents written by Asians are used to assess the perspectives, social priorities, and historical significance of intellectual and political leaders.

### 240 Social and Political Foundations of Modern South Asia

Fall. 4 credits.

M W F 10:10-11. R. Ahmed.

A survey of the social and political history of South Asia in the nineteenth and twentieth centuries. The course will concentrate on the social and political foundations of the three major South Asian countries—India, Pakistan, and Bangladesh—during the colonial period with particular focus on the role of the masses in the anticolonial struggle. It will emphasize the nature of response and reaction to colonial rule by the different classes and communities in the subcontinent and will explore how they interacted with each other and joined hands in the common struggle for freedom. It will conclude with some reflections on the recent social and political developments in the three countries.

### [243 China and the West before Imperialism

Fall. 3 credits. Open to freshmen and sophomores. Prerequisite: permission of instructor. Limited to 15 students.

T 2:30-4:20. C. A. Peterson.]

### 293 History of China up to Modern Times

Fall. 4 credits.

T R 9:05 plus an additional hour, M 11:15 or 1:25. C. A. Peterson.

A survey of the principal developments in the history of China from the earliest times to the eighteenth century that also undertakes a topical introduction to Chinese culture and civilization, in part by the use of visual materials.

### [294 History of China in Modern Times

Spring. 4 credits. Not offered 1990-91.

T R 10:10 plus additional hour, R 11:15, 1:25, or 2:30. S. Cochran.

A survey that concentrates on the rise of the last imperial dynasty in the seventeenth and eighteenth centuries, the upheavals resulting from domestic rebellions and foreign imperialism in the nineteenth century, and the twentieth-century efforts to achieve social mobilization and political unity.]

### 297 Premodern Japan: Historical Perspectives

Fall. 4 credits.

T R 1:25 plus disc, R 2:30. J. R. Piggott.

This course explores the premodern civilization of Japan from a variety of historical perspectives. A text, readings from primary sources and literature, several historical essays, and a catalog of art treasures will be assigned. Students will gain familiarity with the high points of premodern Japanese history and consider a number of comparative questions about Japan's premodern evolution compared with that of Europe and China.

### [298 State, Society, and Culture in Modern Japan

Spring. 4 credits. Not offered 1990-91.

T R 1:25 plus disc, F 1:25 or 2:30. J. V. Koschmann.

A survey of Japan from the mid-eighteenth century to the present, with special attention to changing configurations of institutional structure, knowledge, action, and conceptions of history. Japanese works in translation will be read and discussed in addition to secondary sources.]

### [342 Hiroshima and Nagasaki

Summer. 4 credits. Not offered 1991.

J. V. Koschmann.

The biological, psychological, and social impact and lasting significance of the atomic bombings of Japan during World War II are reconsidered through historical and scientific studies, first-person memoirs, literature, and film. Evaluation of recent historical research on the American decision to use the bombs. Consideration of the relevance of Hiroshima and Nagasaki to the present American defense strategy and the danger of nuclear war.]

### [360 Early Warfare, East and West

Spring. 4 credits. Not offered 1990-91.

For description see Comparative History.]

### 393 Images of Humanity in Medieval China (also Society for the Humanities 425)

Fall. 4 credits. Permission required.

M 2:30-3:30 and W 2:30-4:25.

J. R. McRae and C. A. Peterson.

For description see Comparative History.

### 395 Southeast Asia to the Eighteenth Century

Fall. 4 credits.

T R 11:15-12:05 plus disc R 2:30.

D. K. Wyatt.

A survey of the earlier history of Southeast Asia, concentrating particularly on regional movements of economic, social, cultural, and political change and using, to the extent possible, readings in primary sources.

### 396 Southeast Asian History from the Eighteenth Century

Spring. 4 credits.

T R 11:15-12:05 plus disc F 11:15, 2:30.

D. K. Wyatt.

A survey of the modern history of Southeast Asia with special attention to the formation of modern states (colonial as well as national), changing economic and social structure, and consciousness. Primary texts will be read in translation whenever feasible.

### 398 The Tale of Genji in Historical Perspective: Japan in the Year 1000

Fall. 4 credits.

W 2:30-4:30. J. R. Piggott.

The *Tale of Genji* is a classic of premodern Japanese literature and is often cited as the earliest novel in world literary history. It was written by a female courtier, Murasaki Shikibu, around the year 1000 A.D. The *Tale* gives readers a broad window into Japan's courtly society at a time when many of the component elements of Japan's classical tradition were in the making.

### [399 War as Myth and History in Postwar Japan (also Asian Studies 381)

Fall. 4 credits. Not offered 1990-91.

T R 1:25. B. deBary, J. V. Koschmann.

How is the "war story" told in postwar Japan? The course will examine persisting manifestations of the war memory in contemporary Japanese cultural life, with emphasis on ways in which the story of World War II has been retold, reinterpreted, and given new symbolic and factual significance in light of changing historical circumstances. Class discussion will focus on the interpretation of texts, ranging from political thought and history to fiction, film, and poetry.]

### [404 Topics in Premodern Japanese History

Not offered 1990-91.

J. R. Piggott.]



**417 Islam in South Asia**

Fall. 4 credits.

F 2:30–4:30. R. Ahmed.

This course will examine the dominant features of South Asian Islam, including the nature of beliefs and practices, the rituals and institutions in their different local contexts. One of the major objects of this course is to demonstrate that Islam never functioned as a monolithic system in South Asia and developed its own traditions in different local contexts, which did not necessarily conform to the orthodox interpretations by the ulema. It will conclude with a consideration of the major Islamic movements in South Asian Islam in more recent times.

**423 Seminar in Premodern Japanese History: Rise of the Samurai—Warrior Government and Culture in Japan**

Spring. 4 credits.

W 2:30–4:30. J. R. Piggott.

The seminar traces warrior institutions and culture from the Heian period (794–1185) through the Tokugawa age (1600–1868). This millennium spans the classical, medieval, and early modern ages. Because warriors governed Japan during much of this time, the story of warrior development opens a broad window onto premodern society. Students will read a variety of original sources in translation as well as analytical essays, and preliminary consultation with the instructor is advised.

**434 The Social and Religious Movements in Colonial India**

Spring. 4 credits.

Hours to be announced. R. Ahmed.

A study of the social and religious movements in colonial South Asia, which arose as a response and reaction to British Rule in the subcontinent. These movements were not confined to the elite or to any particular community, but touched almost every section of the Indian society. Although these movements were basically social and religious in character, in reality many of these had specific political objectives and influenced the nature and course of the anticolonial struggle. We will concentrate on specific movements and examine the social and economic background of their participants and their programs and strategies. We also explore how these movements created conditions for communal polarization by transforming the attitudes of the masses towards each other on a communal basis.

**479 Continuity and Change in South Asian History: Society and Politics in the Post-Colonial Period**

Spring. 4 credits.

M W 11:15–12:05, plus disc to be arranged. R. Ahmed.

The British left India in 1947 but did not take with them the colonial structure built over two hundred years of their rule in the subcontinent. The indigenous elites, including leaders such as Gandhi, Nehru, and Jinnah, who took over reins of the new states, were themselves the products of the colonial system and did not envisage any basic change in the structure of the states even after independence. They also had to address themselves to the pressing social and economic problems faced by the new states and satisfy the rising expectations of the new elites and also of the people. How far did they succeed? Did their attempts make any major break with the past? We will concentrate on the social, economic, and political

developments in the three major countries of South Asia—India, Pakistan, and Bangladesh—in the post-colonial period and will examine the nature of changes that have shaped the history of region since 1947.

**[489 Undergraduate Seminar in Modern Japanese History]**

Fall. 4 credits. Prerequisites: History 297 (formerly 397) or 298 (formerly 398) or equivalent, and permission of instructor.

J. V. Koschmann. Not offered 1990–91.]

**[492 Undergraduate Seminar in Medieval Chinese History]**

Fall. 4 credits. Prerequisite: History 393 or 360 or permission of instructor. Not offered 1990–91.

Hours to be arranged. C. A. Peterson.]

**[493 Self and Society in Late Imperial and Twentieth-Century China]**

Fall. 4 credits. Prerequisite: History 191 or 394 or permission of instructor. Not offered 1990–91.

R 2:30–4:30. S. Cochran.

Conceptions of self and relations between the individual and society in China from the seventeenth century to the present.]

**[495 Japanese Kingship in Comparative Perspective]**

4 credits. Not offered 1990–91.

T 2:30–4:30. J. R. Piggott.

In this seminar we will examine the early and medieval development of one of the oldest ruling institutions in the world today. Theoretical and comparative readings from premodern societies in Europe and Asia will provide a frame of reference. Prospective seminar members should have completed some study of premodern Japanese history and preliminary consultation with the instructor is advised.]

**[499 Art and Society in Modern China]**

Spring. 4 credits. Not offered 1990–91.

W 2:30–4:30. S. Cochran, M. Young.

The relation between the visual arts and social change in China from the seventeenth century to the present. The value of art as a reflection of social reality and as an agent for social reform is analyzed on the basis of a variety of visual materials that range from calligraphy, paintings, and porcelains of the seventeenth and eighteenth centuries to woodblock prints, photographs, and films of the nineteenth and twentieth centuries.]

**691 Chinese Historiography and Source Materials**

Fall. 4 credits. Prerequisite: permission of instructor.

Hours to be arranged. C. A. Peterson.

**693–694 Problems in Modern Chinese History**

693, fall; 694, spring. 4 credits. Prerequisite: permission of instructor.

R 2:30–4:25. S. Cochran.

**695 Early Southeast Asia: Graduate Proseminar**

Fall. 4 credits.

R 2:30–4:30. D. K. Wyatt.

Introduction to the history of Southeast Asia for graduate students. Students will be expected to attend the lectures and complete the readings for History 395, and they will meet separately as a group to further explore selected topics.

**696 Modern Southeast Asia: Graduate Proseminar**

Spring. 4 credits.

R 2:30–4:30. D. K. Wyatt.

Introduction to the modern history of Southeast Asia for graduate students. Students will be expected to attend the lectures and complete the readings for History 396, and they will meet separately as a group to further explore selected topics.

**697 Seminar in Southeast Asian Paleography**

Fall. 4 credits.

Hours to be arranged. D. K. Wyatt.

Examination of the writing systems of Southeast Asia, paying particular attention to premodern sources, including manuscripts and inscriptions. Topic for 1990: Tai scripts, including Tai Yuan, Khoen, Lü, Lao, Shan, and Tai Dam.

**[791–792 Seminar in Medieval Chinese History]**

791, fall; 792, spring. 4 credits each term.

Prerequisite: permission of instructor. Not offered 1990–91.

C. A. Peterson.]

**[793–794 Seminar in Modern Chinese History]**

793, fall; 794, spring. 4 credits each term.

Prerequisite: permission of instructor. Not offered 1990–91.

Hours to be arranged. S. Cochran.]

**795 Seminar in Modern Southeast Asian History**

Fall. 4 credits. Prerequisite: History 696.

Hours to be arranged. D. K. Wyatt.

Advanced seminar in modern Southeast Asian history.

**796 Seminar in Southeast Asian History**

Spring. 4 credits.

Hours to be arranged. D. K. Wyatt.

**[797–798 Seminar in Japanese Thought]**

797, fall; 798, spring. 4 credits each term. Not offered 1990–91.]

Hours to be arranged. J. V. Koschmann.]

**Ancient European History****[265 Ancient Greece from Homer to Alexander the Great]**

Fall. 4 credits. Open to freshmen. Not offered 1990–91; next offered 1991–92.

T R 10:10–11; disc, W 3:35, R 12:20 or 2:30. B. Strauss.

A survey of Greece from the earliest times to the end of the Classical period in the late fourth century B.C. The course focuses on the Greek genius: its causes, its greatness, its defects, and its legacy. The Heroic Age, the city-state, ancient democracy, and the intellectual ferment of the Greek Enlightenment are the main topics of study. Readings in translation from Homer, Aristophanes, Sophocles, Herodotus, Thucydides, Plato, Aristotle, and from the evidence of ancient inscriptions, coins, art, and architecture.]

**266 War and Peace in Greece and Rome (also Government 393)**

Fall. 4 credits. Open to freshmen.

T R 10:10–11:25; disc to be arranged. B. Strauss, R. N. Lebow.

A study of war and peace in the ancient Mediterranean world in light of modern theories of international relations. The course will test the validity of modern theories against ancient models and will ask why the ancient experience can contribute to modern theory and practice. Case studies include the Peloponnesian War, the second Punic War, Alexander's conquests, and the defense of the Roman empire.

**268 A History of Rome from Republic to Holy City**

Spring. 4 credits. Open to freshmen.

T R 10:10–11; disc. W 3:35, R 12:20 or 2:30. B. Strauss.

A survey of Rome from the founding of the Republic to the end of the Western Empire. The focus is on the Roman conquest of the Mediterranean world and on the cultural reconquest of Rome by the vanquished. Roman politics, peasant society, Imperialism, and propaganda are the main topics of the first half. The government of the Caesars, society during the Roman peace, and the fertile interaction of Romans, Jews, and Greeks that produced Christianity are the main topics of the second. Readings in translation include Cicero, Polybius, Josephus, Tacitus, Petronius, Plutarch, and Saint Augustine.

**[373 The Greek City from Alexander to Augustus**

4 credits. Not offered 1990–91.

T R 10:10–11:00; disc to be arranged. B. Strauss.

A twofold search for Alexander the conqueror and the man and for the character of the world he created, in which the Greek city was planted as far as Egypt and India. These new cities saw a change from republicanism to monarchy, from community values to individualism, from particularism to ecumenicalism; embraced the new philosophies of Stoicism and Epicureanism; and were the hothouses of a new religion: Christianity. Readings in translation include Arrian, Plutarch, Aristophanes, Menander, Theocritus, Polybius, the Book of Maccabees, Epicurus, and Lucretius.]

**452 The Tragedy of Classical Athens, 462–404 B.C.**

Spring. 4 credits. Prerequisite: permission of instructor.

T 2:30–4:30. B. Strauss.

The nature of Athenian democracy, society, and culture in the "golden age" of Athens. The course will examine the influence of Athenian political life on the great tragedians of the age and the influence of tragedy on the Athenians' conception of their character and history. Readings from Herodotus, Thucydides, Aeschylus, Sophocles, Euripides, Aristophanes, Plato, Aristotle, and Plutarch.

**[453 Crisis of the Greek City-State, 415–336 B.C.]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1990–91.

M 2:30–4:30. B. Strauss.

The fortunes of the city-state and citizen in an age of uncertainty. The focus is on Athens with some attention paid to the wider Greek world. Topics include the nature of Athenian politics, Athenian society, cultural change, the war between the city-states, crisis as a historical

concept, and anthropology and ancient Greece. Readings in translation include Thucydides, Sophocles, Euripides, Aristophanes, Plato, Aristotle, Demosthenes, and Xenophon.]

**455 The Family and Politics in Ancient Greece and Rome**

Fall. 4 credits. Prerequisite: History 265, 268, or 461 or permission of instructor.

T 2:30–4:30. B. Strauss.

If Greece and Rome are the foundation, at least symbolically, of Western civilization, then the family is the foundation of Greece and Rome. We shall consider such topics in the ancient family as parents and children, sibling rivalry, marriage, gender roles, birth control, the family and social crisis, the family and politics, and the family in the early church. Wherever possible, analogies to, comparisons with, and the implications for, the United States in the 1980s will be suggested. Readings include legal and political speeches, comedy, tragedy, philosophy, sermons and religious texts, inscriptions, and modern scholarship.

**[461 The Greco-Roman World in Late Antiquity and Early Byzantine Times, A.D. 306–565]**

Spring. Not offered 1990–91.

For description see Medieval, Renaissance, and Early Modern European History.]

**496 Origins of the Hellenistic World: Alexander the Great and his Legacy (also Classics 496 and Classics 602)**

Spring. 4 credits. Prerequisite: permission of instructor.

R 1:25–4:25. E. Gruen.

This course will explore the sweeping changes (political, institutional, religious, and cultural) set in motion by Alexander's invasion of the Persian empire and the fierce contest over his heritage. The seminar requires active participation in the weekly discussions, two oral reports, and one research paper.

**Medieval, Renaissance, and Early Modern European History****151 Introduction to Western Civilization**

Fall. 4 credits.

T R 11:15–12:05, plus one disc section

per week. L. P. Williams.

History 151 is offered in two distinct sections: History 151W (W is for writing) and 151R (R is for reading). The lectures are the same for both sections. History 151 will examine the basic political, social, economic, and intellectual institutions of western civilization from antiquity to 1600 AD. In History 151W this is done through selections from original and secondary sources; in History 151R, some of the great contemporary works will be read *in toto*. Among these will be the Egyptian Memphite theology, Plato's *Apology*, Augustine's *Confessions*, and Thomas Moore's *Utopia*. Students in History 151W will write weekly 1000-word essays until they receive two B+ grades in a row, after which the papers become optional. Students in 151R will write one critical review of 750 words of one of the works read by them. All freshmen *must* take History 151W.

**152 Introduction to Western Civilization**

Spring. 4 credits.

For description see Modern European History.

**222 Public Life and Literature in Tudor England**

Fall. 4 credits. Prerequisite: permission of instructor.

M W F 9:05–9:55. F. G. Marcham.

A study of the chief developments in the political, governmental, and religious life of England in the sixteenth century and weekly discussions of a selection of Tudor prose, poetry, and drama.

**257 English History from Anglo-Saxon Times to 1485**

Spring. 4 credits.

M W F 11:15–12:05. P. Hyams.

A survey of the government, social organization, and cultural and religious experience of the English people. Particular stress is laid on the unification of the realm, the emergence of state institutions such as parliament, and changes in economic organization (manors, towns and commerce). The approach will be comparative within a context of contemporary European developments.

**[259 The Crusades]**

Fall. 4 credits.

M W F 11:15–12:05 plus disc to be announced. P. R. Hyams. Not offered 1990–91.

This lecture course examines the Crusading Movement and the states it produced from the eleventh century to the fall of the mainland Kingdom of Jerusalem in 1292. Central themes include: the history of the Church and its contextual intellectual history, political narrative and military history, social and economic analysis of Europeans in Outremer (the Mid-East), and the conflict of cultures and religions during a formative period in Western civilization.]

**263 The Earlier Middle Ages**

Spring. 4 credits.

M W F 12:20. J. J. John.

A survey of Medieval civilization from ca. 300 to ca. 1100 dealing with religious, intellectual, political, and economic developments in Western Europe.

**264 The High Middle Ages**

Fall. 4 credits.

M W F 11:15–12:05. P. Hyams.

A survey of Medieval civilization from ca. 1100 to ca. 1450 dealing with religious, intellectual, political, and economic developments in Western Europe. Lectures and class discussions.

**[350 Early Renaissance Europe]**

Fall. 4 credits. Not offered 1990–91.

T R 10:10–11:25. J. M. Najemy.

An exploration of intellectual, cultural, and religious developments in Western Europe, but with special attention to Italy, from the age of Dante and Marsilius, through the several stages of Italian humanism from Petrarch to Alberti to Pico, down to the generation of Machiavelli, More, and Erasmus. The course will seek to problematize the notion of a "Renaissance" in the period's ambivalent attitudes toward history, learning, culture, language, and the role of intellectuals in politics and society. Emphasis will be placed on the close reading of primary sources and on issues of interpretation.]

**351 Machiavelli**

Spring. 4 credits.

T R 11:40–12:55. J. M. Najemy.

This course will present Machiavelli in a variety of historical and interpretive contexts: European and Italian politics in the early sixteenth century; the decline of the Florentine republic and the rise of the Medicean principate; Machiavelli's own career in government and his, and the republic's, crisis in 1512–13; the intellectual traditions of Renaissance humanism, political thought, and the revival of antiquity; vernacular literary currents and popular culture; and the remarkable generation of political figures, writers, and theorists with whom Machiavelli associated and corresponded. Emphasis will be placed on a close reading of the major works (including the letters, *The Prince*, the *Discourses*, *The Mandragola*, and selections from *The Art of War* and the *Florentine Histories*, all in translation) and a critical examination, in the light of that reading, of some major modern interpretations of Machiavelli.

**364 The Culture of the Later Renaissance (also Comparative Literature 362 and English 325)**

Spring. 4 credits.

T R 10:10–11; disc R and F to be arranged. C. Kaske.

Members of various departments will lecture on Luther, Michelangelo, Montaigne, Edmund Spenser, Monteverdi, Cervantes, Copernicus, and Galileo. Guest lecturers will include R. Harris-Warrick, music; Peter Dear, history; and C. Arroyo, romance studies. Lectures and discussion will undertake close readings of texts, literary and visual, and will introduce different methods of interpretation and of historical analysis. Written requirements: two short papers and final examination.

**[365 Medieval Culture, 400–1150]**

Spring. 4 credits. Prerequisite: History 263 or permission of instructor. Not offered 1990–91. Next offered 1991–92.

T R 2:55–4:10. J. J. John.

Intellectual and cultural developments in the age of monasticism, from St. Augustine and St. Benedict to St. Anselm and St. Bernard of Clairvaux.]

**366 Medieval Culture, 1100–1300**

Spring. 4 credits. Prerequisite: History 264 or permission of instructor.

T R 2:55–4:10. J. J. John.

The origin and development of the universities will be studied as background for a consideration of the scholastic mentality and its influence on the art, literature, philosophy, science, script, and theology of the period. Readings from Abelard, Hugh of St. Victor, Bonaventure, Thomas Aquinas, Dante, and others.

**367 Feudalism and Chivalry: Secular Culture in Medieval France, 1000–1300**

Fall. 4 credits. No prerequisites; History 263 or 264 would help.

M 2:30–4:25. P. R. Hyams.

An upper-level reading survey of the main currents of noble lay culture in France, which led European fashions in love, warfare, entertainment, and environment through most of the period. There will be heavy emphasis on contemporary sources (in English), including lively and complete readings from epic literature (the *Song of Roland*), lives, and chronicles.

**368 Marriage and Sexuality in Medieval Europe**

Spring. 4 credits.

M W F 2:30–3:25. P. R. Hyams.

This seminar examines the forces defining and enlivening marriage, as a central event in every person's life and career. Its focus ranges from Church prescriptions, in canon law and theology that still affect twentieth-century attitudes, to secular sexual practice.

**369 The History of Florence in the Time of the Republic, 1250–1530**

Fall. 4 credits.

T R 10:10–11:25. J. M. Najemy.

Florentine politics and society from the communal period through the age of Dante, the rise and decline of the guild republic, the age of the civic humanism, and the rise of the Medici to the time of Machiavelli. Economic structures and social classes, corporate politics, family history, and political and historical ideas are considered in the context of the emergence and transformation of Republican government.

**371 History of England under the Tudors and Stuarts**

Fall. 4 credits. Not opened to freshmen except by permission of instructor.

T R 2:55–4:10. P. Lake.

A survey of the period of reformation and revolution in which many historians have discerned the emergence of modern society. The course takes account of the relations of England with other parts of the British Isles and Europe, but emphasizes the workings of the political system as well as the impact of religious conflict and ideological change.

**372 Religion and Society in Early Modern England**

Spring. 4 credits. Not open to freshmen except by permission of instructor.

T R 2:55–4:10. P. Lake.

An examination of religious change from the late middle ages to the late 17th century—from Catholic unity to pluralist Protestantism—with attention to the way this change influenced a wide range of social and cultural contexts. Among the manifestations to be looked at are: the growth of literacy, social and cultural differentiation, and the "reformation of manners."

**[374 War, Trade, and Empire, 1500–1815]**

Spring. 4 credits. Not offered 1990–91. Next offered fall 1991.

M W 2:30–4. D. A. Baugh.

Maritime enterprise, imperial policy, and naval power in the age of expansion. The rise and decline of the Portuguese and Spanish empires are considered, but the emphasis is on English, French, and Dutch rivalry in the Atlantic and Caribbean.]

**387 Social and Cultural History of Sixteenth-Century Europe**

Fall. 4 credits.

M W 1:25–2:15 plus disc W 2:30 or 3:35. D. Sabeau.

This course examines social processes and perceptions of change during the Reformation era. Topics include social differentiation in the countryside, forms of aristocratic domination, court society, rural and urban attempts at resistance and rebellion, violence, the exercise of state power and its representation, religious and political ideology, popular culture, and the reform of manners.

**388 Social and Cultural History of Seventeenth-Century Europe**

For description, see Modern European History.

**[405 Population and History]**

Not offered 1990–91.

For description see Comparative History.]

**[409 Seminar on Work in Europe and America]**

Not offered 1990–91.

For description see Comparative History.]

**437 Church and State during the Middle Ages**

Fall. 4 credits.

T R 11:40–12:55. B. Tierney.

Relationships between ecclesiastical and secular authorities and the ways in which these relationships influenced the growth of government in the Middle Age are considered. Particular attention is given to the growth of Medieval constitutionalism.

**[438 Francis of Assisi and the Franciscans]**

Fall. 4 credits. Not offered 1990–91.

T 2:30–4:30. B. Tierney.

A seminar with lectures, class papers, and class discussions. The course will begin with detailed study of the early lives of Francis in translation, then consider the impact of the Franciscans on the medieval church and vice versa.]

**[451 Lord and Peasant in Europe: A Seminar in Social History]**

Not offered 1990–91.

For description see Comparative History.]

**[461 The Greco-Roman World in Late Antiquity and Early Byzantine Times, A.D. 306–565]**

Spring. 4 credits. Prerequisite: History 263, 265, or 268 or permission of instructor. Not offered 1990–91.

T 2:30–4:30. B. Strauss.

A seminar in the cultural, socioeconomic, and political history of the period. Topics include the interaction of paganism and Christianity; art form, civic life, and the individual; the family; Julian and Justinian; and the concept of decline and fall.]

**463 Seminar on Europe during the Age of Absolutism**

Fall. 4 credits. Permission of instructor required.

M 2:30–4:30. D. Sabeau.

This seminar examines different topics on the social and cultural history of Europe during the sixteenth and seventeenth centuries. It will be concerned with issues of power and state practice, popular culture, religion, rituals of domination and resistance, and the ideology of statecraft. Readings will include primary and secondary text. The topic for fall 1990 is the witch persecution.

**[468 Undergraduate Seminar in Renaissance History]**

Fall. 4 credits. Not offered 1990–91.

J. M. Najemy.]

**469 Emergence of the English State, 1530-1730**

Fall. 4 credits. Seminar for juniors and seniors; others by permission of instructor.

M 2:30-4:30. P. Lake and D. Baugh.

The course considers the claim that the world's first modern state developed in England at this time. It studies the innovation and adaptation of informal structures as well as formal institutions; the problem of royal revenue; the impact of war on administration; and the resulting changes in political culture. Some comparisons are made with what was occurring in other countries. Theories of governmental development, along with usages of such key terms as 'state,' 'bureaucracy,' and 'corruption,' are critically examined.

**472 Political and Constitutional Conflict in England, 1560-1688**

Spring. 4 credits. Seminar for juniors and seniors; others by permission of instructor.

M 2:30-4:30. P. Lake.

The course explores the conflict between Crown and Parliament, giving attention to practical political maneuvers as well as ideology, political culture, and contending constitutional theories of the time. The traditional Whig conception of English constitutional history is critically examined in the light of recent revisionist investigations into the nature of court and local politics.

**[473 History of Sexuality]**

Not offered 1990-91.

For description, see Modern European History.]

**[663 Seminar in Renaissance History]**

Spring. 4 credits. Not offered 1990-91.

J. M. Najemy.]

**664-665 Seminar in Latin Paleography**

664, fall; 665, spring. 4 credits each term.

Hours to be arranged. J. J. John.

**666 Seminar in Medieval History**

Fall. 4 credits.

Hours to be arranged. J. J. John.

**[669 Seminar in Medieval History]**

Fall. 4 credits. Not offered 1990-91.

Hours to be arranged. B. Tierney.]

**Modern European History****151 Introduction to Western Civilization**

Fall. Summer. L. P. Williams.

For description see Medieval, Renaissance, and Early Modern European History.

**152 Introduction to Western Civilization (1600 to the end of World War II)**

Spring. 4 credits.

T R 11:15-12:05; disc to be arranged.

L. P. Williams.

History 152 is offered in two distinct sections: History 151W (W is for writing) and 151R (R is for reading). The lectures are the same for both sections. Emphasis in this course is on the interpretation of important historical issues. A small number of papers is required in which the student will enjoy the pleasure of putting historical data together into a satisfying interpretive whole. Readings include a number of novels that cast light upon various periods or events, as well as original documents and interpretations by professional historians. History 151 is not a prerequisite for History 152, although it is recommended.

**218 The Russian Military Effort and Foreign Policy**

Fall. 3 credits.

W 12:20-2:20. W. M. Pintner.

An examination of the interrelation of the Imperial Russian military effort and Russian foreign policy. Examples will be taken from various periods ranging from the early Muscovite period to the First World War. Students will write 6 or 7 short papers, do extensive reading, and participate in class discussion.

**226 Public Life and Literature in Twentieth-Century Great Britain**

Spring. 4 credits. Prerequisite: permission of instructor.

T R 9:05-9:55. F. G. Marcham.

A study of British political, social, and constitutional history is paralleled by the reading of plays. Both history and literature are considered. The development of parliamentary democracy in Great Britain, the consequences for her of the two world wars, the emergence of the welfare state, the application to the economy of nationalization, and Great Britain's withdrawal from imperialism are presented. Among the writers read and discussed are Shaw, Maugham, O'Casey, Sherriff, and Osborne.

**[229 A History of European Childhood]**

Spring. 4 credits. Not offered 1990-91. Next offered fall 1991.

N. Karwan-Cutting.

Surveys the history of childhood in Europe from the mid-seventeenth century to the present. Comparisons are made across Western, Eastern, and Mediterranean European Societies. The course delineates those cultural, demographic, religious, political, and economic factors that shaped childhood, both in periods of transition and in times of violent instability. Changing perceptions of childhood are treated in the context of, for example: religious conflict, urbanization, development in science and technology, war, and occupation. All readings are in English.]

**[242 Europe since 1789]**

Spring. 4 credits. Not offered 1990-91.

M. P. Steinberg.

An introduction to major themes, problems, and interpretations in European history from the French Revolution to the consolidation of the Common Market in our own day. The organization will be chronological, but focus will be on the varying forms of political and industrial revolution, liberalism, conservatism, socialism, nationalism, imperialism, fascism, and world war. Readings will include primary materials in political and social theory (Marx and Mill) as well as literature (Thomas Mann, Peter Schneider).]

**252 Russian History to 1800**

Fall. 4 credits.

T R 10:10-11:25. W. M. Pintner.

The origin and development of the fundamental social, political, economic, and cultural institutions that have determined the nature of contemporary Soviet society.

**253 Russian History since 1800**

Spring. 4 credits. First preference will be given to students who have taken History 252 if enrollment is limited.

T R 10:10-11:25. W. Pintner.

Nineteenth- and twentieth-century Russia, with emphasis on the major social, political, and economic changes that have transformed Russia since the mid-nineteenth century.

**[258 English History from the Revolution of 1688 to the Present]**

Spring. 4 credits. Not offered 1990-91. Next offered Spring 1992.

T R 1:25-2:40. D. A. Baugh.

An introductory course encompassing political, social, economic, imperial, and constitutional developments. Major themes are the significance of 1688, eighteenth-century society and politics, the rise and decline of liberalism, the Irish Question, the impact of the two world wars, and the challenges and achievements of the welfare state.]

**283 Contemporary European Society and Culture (also Government 343; Ger Lit 283)**

Fall. 4 credits.

T R 2:55-4:10; disc to be arranged.

J. H. Weiss, J. Pontusson, G. Waite.

The crisis of communist regimes in Eastern Europe has brought an end to the postwar division of Europe. At the same time, the European Community is emerging as a major economic and political power in the world. This course explores these dramatic new developments against the background of an interdisciplinary and comparative investigation of postwar European politics, society, and culture. Topics include generational change, class structure, economic and social polity, new social movements, family and community life, film, and cultural criticism.

**[352 The End of the Austro-Hungarian Monarchy, 1848-1919]**

Fall. 4 credits. Open to freshmen with permission of instructor. Not offered 1990-91.

M W 9:05; disc, W 10:10 and 2:30.

I. V. Hull.

The decline and fall of the multinational empire. Emphasis is on the political and social problems presented to the monarchy both by industrialization and by the increasingly restive subject nationalities (Poles, Czechs, Serbs, Croats). How did the monarchy handle these problems? Why did it fail? Focus is on cultural matters. Readings are drawn from Freud, Schnitzler, Hofmannsthal, Karl Kraus, Joseph Roth, and others.]

**[353 Nineteenth-Century European Intellectual History]**

Fall. 4 credits. Not offered 1990-91.

T R 11:40-12:55. D. LaCapra.

The focus is on social and cultural thought in France, Germany, and England. Topics include reactions to the French Revolution and industrialization; the definition of conservative, liberal, and radical perspectives; and the relation between literature and social thought. Readings include Tocqueville, Mill, Hegel, Marx, Stendhal, Flaubert, Dostoevsky, Nietzsche, and Durkheim.]

**354 Twentieth-Century European Intellectual History**

Fall. 4 credits.

T R 11:40-12:55. D. LaCapra.

This course examines significant currents in twentieth-century thought in France, Germany, and England. Topics include the varieties of existentialism, the development of the social sciences, psychoanalysis, the modern novel, structuralism, and poststructuralism. Readings include Weber, Freud, Heidegger, Sartre, Camus, Woolf, Foucault, and Derrida.



**355 The Old Regime: France in the Seventeenth and Eighteenth Centuries**

Fall. 4 credits.

T R 2:55-4:10 plus disc to be arranged.  
S. L. Kaplan.

A systematic examination of the social structure, economic life, political organization, and collective mentalities of a society that eclipsed all others in its time and then, brutally and irreversibly, began to age. France, in European perspective, from the wars of religion through the age of Voltaire.

**[356 The Era of the French Revolution and Napoleon**

Spring. 4 credits. Not offered 1990-91.

T R 2:55-4:10. S. L. Kaplan.

A study of the failure of the traditional system, its dismantling and replacement in France, and the international consequences. Focus will be on the meaning of the revolutionary experience, the tension between the desires to destroy and to create, and the implications of the Revolution for the modern world.]

**[357 Survey of German History, 1648-1890**

Fall. 4 credits. Open to freshmen with permission of instructor. Not offered 1990-91. Next offered Fall 1991.

M W 11:15-12:05; undergrad disc, W 1:25 or 2:30; grad disc, W 1:25. I. V. Hull.

An examination of the social, political, intellectual, and diplomatic history of the German states from the devastation of the Thirty Years' War, through absolutism, the bourgeois revolutions of 1848, and the struggle for unification, to the beginning of the modern industrial state.]

**[358 Survey of German History, 1890 to the Present**

Spring. 4 credits. Open to freshmen with permission of instructor.

M W F 11:15-12:05; undergrad disc, W 1:25 or 2:30; grad disc, W 1:25. I. V. Hull. Not offered 1990-91. Next offered Spring 1992.

The "German problem" is examined. Major topics include tensions caused by rapid industrialization presided over by a preindustrial, political elite; origins of World War I; growth of anti-Semitism; social dislocations of World War I; failure of the socialist revolution of 1918-1919; unstable Weimar democracy and the rise of nazism; the Nazi state; World War II; and the two Germanies.]

**[362 European Cultural History, 1815-1870**

4 credits. Not offered 1990-91.

M. P. Steinberg.

An analysis of major problems and themes associated with the construction and interpretation of European modernity, from the Enlightenment and the French and industrial revolutions to the unification of Germany. The interplay between political change and cultural and intellectual life will be stressed, with emphasis on primary materials (discursive works as well as painting, music, opera, architecture, and cultural festivals and institutions.)

**[363 European Cultural History, 1870-1945**

4 credits. Next offered 1991-92.

M. P. Steinberg.

The question of the "crisis of European culture," in its ideological and critical manifestations, from the various European "fins-de-siècle" to the two world wars.]

**[379 War and Society: The Origins of the First World War, 1870-1919**

Fall. 4 credits. Open to freshmen with permission of instructor. Not offered 1990-91. Next offered Spring 1992.

M W F 11:15. I. V. Hull, W. M. Pintner, D. Baugh.

The First World War destroyed the European world: its hegemony in international politics, its international balance, its social and economic structures, its intellectual certainties. This course examines the long-term and immediate causes of this cataclysm, with special focus on the relations between the various countries' domestic politics and their foreign policies, the changing balance of power, economic rivalries, imperialism, the growth of extreme nationalism, and the arms race. It ends by considering why the war was so long and destructive and why, afterwards, no one could put the pieces back together again.]

**[380 Social History of Western Technology**

Fall. Not offered 1990-91.

For description see History of Science.]

**383 Europe, 1900-1945**

Fall. 4 credits.

T R 10:10 plus disc on W. J. H. Weiss.

An investigation of the major developments in European politics between 1900 and the end of the Second World War. Emphasis on the rise and fall of democratic political systems and their alternatives. Topics include the reorientation of liberalism and socialism, the transforming effects of war and depression, the dynamics and diplomacy of fascism, the European response to the economic and ideological influence of America and the Soviet Union, the changes in Eastern Europe during the interwar years, and the interaction between politics and social structure.

**384 Europe, 1945-1968**

Spring. 4 credits.

T R 10:10 plus disc on W. J. H. Weiss.

A political and social history of Europe between the fall of fascism and the political crises of 1968. Emphasis on the comparative study of the elaboration of democratic institutions and ideologies. Topics include the origins and course of the Cold War in Western and Eastern Europe, Gaullism and Christian Democracy, the emergence of welfare states, liberal-democratic and Communist culture, the end of colonial empires in the West, opposition movements in Eastern Europe, and the general upheaval of 1968.

**[385 Europe, 1968-1990**

Fall. 4 credits. Not offered 1990-91.

T R 10:10 plus disc on W. J. H. Weiss.

A political and social history of Europe between the crises of 1968 and the collapse of Communist regimes in Eastern Europe. Emphasis on the comparative study of the democratic institutions and ideologies. Topics include the weakening of democratic welfare states; the end of dictatorship in Spain, Portugal, and Greece; the role of ethnic minorities; the politics of the arms race; Thatcherism and its alternatives; opposition social movements in Western and Eastern Europe; and European migration.]

**388 Social and Cultural History of Seventeenth-Century Europe**

Spring. 4 credits.

T R 1:25. D. Sabean.

An examination of cultural formations in a period of social and political crisis. Topics include the ideology of the patriarchal household, church and state programs of discipline, the reconstruction of the aristocracy, court society, Baroque culture, local and social systems, peasant revolts, gender construction, and representations of the self.

**[405 Population and History**

Not offered 1990-91.

For description see Comparative History.]

**406 The People in the French Revolution**

Spring. 4 credits.

W 2:30-4:30. S. L. Kaplan.

The Revolution was nothing if not a mass event. Mass action played a critical part in shaping its course. The "re-invention" of France affected the population down to each village and demanded decisions from virtually every adult. This course will focus on the people as actors: their collective memory, their ideologies, their repertoire of intervention, the formation of a popular political culture. It will examine the encounters between the people (in their multiple incarnations) and the revolutionary elites who sought to articulate and appropriate the Revolution. A major theme will be the tension between the ambitions to achieve liberty and equality.

**[409 Seminar on Work in Europe and America**

Not offered 1990-91.

For description see Comparative History.]

**[435 Collective Action and Politics in Modern Europe (also Government 435)**

Fall. 4 credits. Not offered 1990-91.

W 2:30-4:30. S. L. Kaplan, S. Tarrow.

An interdisciplinary seminar examining the causes, dynamics, and outcomes of social movements in modern and contemporary Europe. Ranging from the carnivalesque uprisings, bread riots, and tax revolts of early modern Europe to the strikes and revolutions of the nineteenth century, to the student, peace, and women's movements of the present, these movements have deeply marked the development of contemporary state and society. Cases will be drawn mainly from Europe with ventures into America and the non-Western world. Our ambition is to assess the ways in which popular collective action both shaped and was shaped by the development of the modern state. A senior seminar in modern European studies.]

**[441 Seminar in the European Enlightenment**

Spring. 4 credits. Prerequisite: permission of instructor.

T 2:55-4:20. I. V. Hull. Not offered 1990-91.

This seminar examines the eighteenth-century Enlightenment from a number of different vantage points: its intellectual debates, the social bases carrying it, the institutions (state, social, and economic) that spread it, and the ways historians have (re-) interpreted it over the years. The reading mixes primary sources (major thinkers of the period in England, Germany, Italy, and France) with secondary analyses by scholars. The specific topic for spring 1990 is the development of the sex/gender system.]

**[450 Seminar in European Imperialism]**

Spring. 4 credits. Open to upper-level undergraduates. Prerequisite: permission of instructor. Not offered 1990-91.

M 12:20-2:20. I. V. Hull.

Focuses on the various theories of imperialism with particular reference to the domestic causes, uses, and repercussions of late nineteenth century imperialism in Germany, France, and Great Britain.]

**[451 Lord and Peasant in Europe: A Seminar in Social History]**

Not offered 1990-91.

For description see Comparative History.]

**[457 Seminar in European Fascism]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

M 1:25-3:25. I. V. Hull.

An attempt to define and understand the social, political, and intellectual origins, mechanisms, and goals of European fascist movements of the 1920s and 1930s by detailed study of German national socialism, Italian fascism, and the Action Française.]

**[459 The Making of the English Ruling Class, 1680-1780]**

Spring. 4 credits. Not offered 1990-91.

M 2:30-4:30. D. A. Baugh.

Perspectives on the landed aristocracy's continuing domination of politics. Topics include the political system, political and social thought, aristocratic lifestyle, religion, crime and criminal justice, the Old Poor Law, land and commerce, the role of London, and relations with Scotland, Ireland, and America. Readings are drawn from both modern historians and eighteenth-century authors.]

**[464 Russian Social History]**

Spring. 4 credits. Prerequisite: one semester of Russian history or permission of instructor.

W 12:20-2:20. W. M. Pintner.

A seminar devoted to an examination of the diverse social groups that comprise imperial Russia and Soviet society. Includes systematic comparison with other countries.

**[465 Seminar on Modernity and Modernism]**

Spring. 4 credits. Not offered 1990-91.

M. P. Steinberg.

An exploration of the definitions of "modernity" from the Enlightenment to the present and of the varied responses, political, cultural, and aesthetic, known as "modernism." Discussion as well of the questions of the end of modernity, of the post-modern, and their implications.]

**[467 Seminar in Modern European Political History]**

Spring. 4 credits. Not offered 1990-91.

R 2:30-4:30. J. H. Weiss.]

**[470 Social and Cultural History of Contemporary Europe]**

Spring. 4 credits. Prerequisite: one course on contemporary Europe or permission of instructor.

T R 2:55. J. H. Weiss.

Topic: the "other Europe": language, culture, and nation among the minority peoples of Europe. A comparative investigation of the development of the cultural and historical identity of non-dominant European ethnic groups and their relation to the formation and policies of European national states: the Basques, the Welsh, the Catalans, the Bretons, the Occitans, the Gaelic Irish, the Faroese, the Gypsies, the Romansh, and others. The course

will combine historical, literary, and sociolinguistic approaches.

**[473 History of Sexuality]**

Fall. 4 credits. Not offered 1990-91.

W 2:30-4:30. D. Sabean.

A seminar devoted to recent historical approaches to the history of sexuality in Europe from late antiquity to the present, looking at issues of politics, power, ideology, perception, representation, and gender.]

**[474 Topics in Modern European Intellectual History]**

Spring. 4 credits. Prerequisite: permission of instructor.

T 2:30-4:30. D. LaCapra.

**[476 Documenting the Depression: Film, Literature, and Memory]**

4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

Hours to be arranged: one screening session and one disc per week.

J. H. Weiss.

Social and intellectual history of Britain and America in the 1930s with special attention to modes of documentary expression and to subjects lending themselves to treatment by film or oral history: work, popular culture, changes in urban and rural communities, family life, and poverty.]

**[477 Seminar on the Politics of the Enlightenment]**

Fall. 4 credits.

W 2:30-4:30. S. L. Kaplan.

An inquiry into the historical origins of European (especially French) political, social, and economic thought, beginning in the 1680s, at the zenith of Louis XIV's absolutism, and culminating in the French Revolution a century later. Emphasis is on the relation of criticism and theory to actual social, economic, religious, and political conditions. An effort is made to assess the impact of enlightened thought on the eighteenth-century world and to weigh its implications for modern political discourse. Readings in translation from such authors as Bayle, Montesquieu, Voltaire, Rousseau, Diderot, and others as well as from modern scholarly and polemical literature.

**[478 Seminar in Eighteenth-Century French Social History]**

Spring. 4 credits. Not offered 1990-91.

W 2:30-4:30. S. L. Kaplan.

An assessment of the work and influence of F. Braudel, with attention to the trajectory of the "Annales" school.]

**[480 Twentieth-Century Britain]**

Fall. 4 credits. Open to sophomores, juniors, and seniors.

T R 1:25-2:40. D. A. Baugh.

A seminar course with some lectures, focusing on political history. The main emphasis is on the two world wars and their role in British economic and imperial decline. The course also looks at some great personages—Lloyd George, Churchill, and Bevin—and the major political and social transitions, taking departure from Edwardian Liberalism. It examines the rise of the welfare state, the special attributes of the British Labor movement and British socialism, and the significance of Thatcherite Conservatism.

**[483 Seminar in Modern European Social History]**

Fall. 4 credits. Not offered 1990-91.

J. H. Weiss.]

**[498 German Cultural and Social Theory, 1870-1945]**

4 credits. Prerequisite (for undergraduates): History 363 or instructor's permission. Not offered 1990-91. Next offered 1991-92.

M. P. Steinberg.

The production and the critique of cultural ideology in political and cultural contexts from Nietzsche and Wagner to the Austrian "fin-de siècle" and the rise of German sociology and the new art history, to the attempt at integrated cultural criticism of the Frankfurt School.]

**[605 Graduate Seminar in European Cultural and Intellectual History]**

Spring. 4 credits. Not offered 1990-91.

Hours to be arranged. M. P. Steinberg.

Analysis and evaluation of Walter Benjamin's historical thinking as a paradigm of a historical theory of modernity. Focus will be on the interplay of political, cultural, and aesthetic methods and objects of analysis, in Benjamin's work as well as that of contemporaries (Adorno, Cassirer, Warburg), models (Goethe, Hofmannsthal, Baudelaire), and inheritors (Habermas).]

**[655 Seminar in Eighteenth-Century British History]**

4 credits. Not offered 1990-91.

D. A. Baugh.]

**[656 Seminar in Nineteenth-Century British History]**

Spring. 4 credits. Not offered 1990-91.

Hours to be arranged. D. A. Baugh.]

**[661 Graduate Seminar in Twentieth-Century German History]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

T 4-6. I. V. Hull.

This course explores selected topics in the political, social, and cultural history of Germany from 1900 to the present. It is designed to introduce graduate students to the history and historiography of modern Germany and to allow those with sufficient preparation to pursue directed research during the semester.]

**[671 Seminar in the French Revolution]**

Not offered 1990-91.

S. L. Kaplan.]

**[672 Seminar in European Intellectual History]**

Fall. 4 credits.

Hours to be arranged. D. LaCapra.

**[673 Seminar in European Intellectual History]**

Spring. 4 credits.

Hours to be arranged. D. LaCapra.

**[674 Graduate Seminar in German History, 1789-1918]**

Spring. 4 credits. Not offered 1990-91.

M 12:20-2:15. I. V. Hull.

This course explores selected topics in the political, social, and cultural history of Germany from 1770 to 1918. It is designed to introduce graduate students to the history and historiography of modern Germany and to allow those with sufficient preparation to pursue directed research during the semester.]

**[677 Seminar in Russian History]**

Spring. 4 credits each term.

Hours to be arranged. W. M. Pintner.

**[678 Seminar in Modern European Social History]**

Spring. Not offered 1990-91.

Hours to be arranged. J. H. Weiss.]

**[679 Seminar in European History]**

Not offered 1990-91.

S. L. Kaplan.]

**682 Seminar in European Social and Cultural History**

Spring. 4 credits.

W 2:30-4:30. D. Sabeau.

A research seminar devoted to selected topics on the construction of the self in European history.

**Honors and Research Courses**

Note: History 301-302 are not regular courses for which students may sign up at will. They are personal arrangements between an instructor and a particular student. Students must first gain the consent of a particular instructor to work with them.

**301 Supervised Reading**

Fall or spring. 2 credits. Open only to upperclass students. Prerequisite: permission of instructor.

**302 Supervised Research**

Fall or spring. 3 or 4 credits. Open only to upperclass students.

Prerequisite: permission of instructor.

**400 Honors Proseminar**

Fall and spring. 4 credits. Limited to 15 students. For prospective honors candidates in history. Prerequisite: permission of a member of the Honors Committee is required to register.

Fall and spring W 2:30-4:30. Fall:

M. Kammen; Spring: R. L. Moore.

An examination of major approaches to historical inquiry and analysis. Masterworks of historical writing (traditional as well as recent) will be discussed. There will be one short essay and a longer paper (a study of the work of one major historian). The readings will be drawn from all time periods and diverse cultures.

**401 Honors Research**

Fall or spring. 4 credits. Prerequisites: History 400 and permission of instructor.

**402 Honors Thesis**

Fall or spring. 4 credits. Prerequisites: History 400 and permission of instructor.

**703-704 Supervised Reading**

703, fall; 704, spring. 4 credits each term. Limited to graduate students. Prerequisite: permission of instructor.

**709 Introduction to the Graduate Study of History**

Fall. 4 credits. Required of all first-year graduate students.

R 3-5. S. Blumin, J. Najemy.

The course is designed to introduce entering graduate students to crucial issues and problems in historiography that cut across various areas of specialization.

**HISTORY OF ART**

A. Ramage, chair; L. L. Meixner, director of undergraduate studies; J. E. Bernstock, R. G. Calkins, P. Kuniholm, C. Lazzaro, T. W. Leavitt, S. J. O'Connor, T. Willette, M. W. Young

The visual arts—painting, sculpture, and architecture—are a principal mode of human expression. Art historians investigate works of art to understand them in their artistic, historical, and cultural contexts. Courses offered by the department cover the mainstream of Western art (Classical, Medieval, Renaissance, Baroque, and nineteenth and twentieth century) and non-Western art, including that of East and Southeast Asia. Art history is an integral part of interdisciplinary programs such as the Archaeology Program, the East Asia Program, Medieval Studies, and the Southeast Asia Program.

Course offerings vary in scope from introductory courses designed to acquaint the student with the ways of seeing, discussing, and writing about works of art to advanced seminars that concentrate on more-specialized topics. The resources of the Herbert F. Johnson Museum of Art frequently serve as the focus for discussion sections and research assignments.

**The Major**

Students who want to major in the history of art should complete two courses in the Department of History of Art by the end of their sophomore year. These courses are prerequisites for admission to the major but may not be counted toward fulfillment of the major requirements. Prospective majors should apply to the director of undergraduate studies and in their junior and senior years work closely with their advisers to determine a course of study that takes into account the richness and diversity of art history. The program should include at least 30 credits in history of art courses and a minimum of two additional courses in this department or in a related field (such as anthropology, literature, or history) approved by their adviser. Ordinarily the 30 credits in history of art will include the proseminar History of Art 400, that all majors are expected to take in their junior year and at least two additional seminars selected from courses at the 400 or 500 level. Majors are required to have at least one non-Western art course in their program. Majors are encouraged to take studio courses offered by the Department of Art, but these are considered to be electives and do not fulfill major requirements.

**Honors**

To become a candidate for the degree of Bachelor of Arts with honors in the history of art, a student must have a cumulative average of B+ for all courses taken in the department and a cumulative average of B in all arts and sciences courses. Admission to the program requires application to the director of undergraduate studies during the second term of the junior year. The application must include a summary of the proposed project, an endorsement by a faculty sponsor, and a copy of the student's transcript. In the senior year the honors candidate will include among the regular requirements History of Art 600 and 601, which entail the preparation of a senior thesis. This program may not be condensed into one semester.

**Freshman Writing Seminars**

For Freshman Writing Seminar offerings in the History of Art, see the John S. Knight Writing Program's special brochure. These courses may be used as freshman electives but not to satisfy the distribution requirement.

**Courses****220 Introduction to Art History: The Art of the Classical World (also Classics 220)**

Spring. 3 credits.

M W F 10:10-11. A. Ramage.

The sculpture, vase painting, and architecture of the ancient Greeks from the Geometric period through the Hellenistic, and the art of the Romans from the early Republic to the late Empire.

**221 Introduction to Art History: Minoan-Mycenaean Art and Archaeology (also Classics 221 and Archaeology 221)**

Fall. 3 credits. Note: Students may not obtain credit for both this course and Classics 319.

M W F 10:10-11. P. Kuniholm.

The birth of civilization in Greece and the Aegean islands during the Bronze Age. The main focus is on the rise and fall of Minoan Crete and Mycenaean Greece, with consideration given to the nature and significance of Aegean interactions with Egypt, the Near East, and Anatolia.

**[223 Etruscan Art and Archaeology (also Classics 250 and Archaeology 250)]**

3 credits. Not offered 1990-91.

J. Whitehead.]

**230 Introduction to Art History: Monuments of Medieval Art**

Spring. 3 credits.

M W F 12:20-1:10. R. G. Calkins.

An introduction to the approaches to art history through a study of selected works of art from the Middle Ages: architecture, sculpture, painting, manuscript illumination, metalwork, and ivory.

**245 Introduction to Art History: Renaissance and Baroque Art**

Fall. 3 credits. Not open to students who have taken History of Art 240 or 250.

M W and alternate F 10:10-11; discs alternate weeks W 1:25, 2:30, or 3:35; R 9:05, 1:25, or 2:30 or F 10:10. T. Willette.

A survey of selected works of European painting, sculpture, and architecture from 1400 to 1700. The artists considered include Botticelli, Michelangelo, Rembrandt, Velazquez, and Bernini. These and other major artists will be emphasized and viewed through the context of the principal trends and ideas of the time. In addition to distinguishing artists' styles and aesthetic concerns, the course will consider other cultural factors shaping the work of art, such as patronage, religion, politics, and economics. This course is committed to improving student writing as well as teaching how to look at works of art.

**260 Introduction to Art History: The Modern Era**

Fall. 3 credits. Not open to students who have taken History of Art 261.

T R 11:40–12:55. J. E. Bernstock.  
A discussion of the most important developments in art during the nineteenth and twentieth centuries. The emphasis is on major movements and artists such as Impressionism (Monet), Post-Impressionism (van Gogh, Cezanne), Cubism (Picasso), Fauvism (Matisse), Surrealism (Miro), Abstract Expressionism (Pollock), Pop Art (Warhol), and Psychological Realism (Fischl).

**[270 Introduction to Art History: American Art to 1945]**

3 credits. Not offered 1990–91.]

**280 Introduction to Art History: Asian Traditions**

Fall. 3 credits.

M W F 11:15–12:05. S. J. O'Connor.  
Designed to introduce students to the varied responses of the Asian artist in different social and geographical contexts. By selective focus and emphasis rather than broad survey, the student will gain some familiarity with the Javanese shadow-puppet theatre, high-fired ceramics, Chinese landscape painting, Buddhist sculpture and painting of Thailand, Indian miniature paintings, and Japanese prints. A number of class sessions will meet in the Herbert F. Johnson Museum of Art.

**309 Dendrochronology of the Aegean (also Classics 309 and Archaeology 308)**

Fall and spring. 4 credits. Prerequisite: permission of the instructor. Limited to 10 students.

M 12:20; two labs to be arranged.  
P. Kuniholm.  
Participation in a research project of dating modern and ancient tree-ring samples from the Aegean and Mediterranean. Supervised reading and laboratory work. A possibility exists for summer fieldwork in Greece or Turkey.

**[320 The Archaeology of Ancient Greece (also Classics 320)]**

4 credits. Not offered 1990–91.  
J. Coleman.]

**322 Arts of the Roman Empire (also Classics 350)**

Fall. 4 credits. Prerequisite: History of Art 220 or permission of the instructor.

T R 10:10–11:25. J. Whitehead.  
The visual arts in the service of the first world state. The course starts with the Etruscan and Republican period but concentrates on monuments of the Imperial era in Italy and the provinces until the time of Constantine.

**[323 Painting in the Greek and Roman World (also Classics 323)]**

4 credits. Not offered 1990–91.]

**[324 Architecture in the Greek and Roman World (also Classics 324)]**

4 credits. Not offered 1990–91.]

**[325 Greek Vase Painting (also Classics 325)]**

4 credits. Not offered 1990–91.  
A. Ramage.]

**[326 Art and Archaeology of Archaic Greece (also Classics 326)]**

4 credits. Not offered 1990–91.]

**[327 Greek and Roman Coins (also Classics 327)]**

4 credits. Not offered 1990–91.  
A. Ramage.]

**[328 Greeks and Their Neighbors (also Classics 322)]**

4 credits. Not offered 1990–91.  
J. Coleman.]

**[329 Greek Sculpture (also Classics 329)]**

4 credits. Not offered 1990–91.]

**[332 Architecture in the Middle Ages (also Architecture 382)]**

4 credits. Not offered 1990–91.  
R. G. Calkins.]

**[333 Early Medieval Art and Architecture]**

4 credits. Not offered 1990–91.

R. G. Calkins.]

**[334 Romanesque Art and Architecture]**

4 credits. Not offered 1990–91.  
R. G. Calkins.]

**[335 Gothic Art]**

4 credits. Not offered 1990–91.]

**[336 Prelude to the Italian Renaissance]**

Spring. 4 credits. Not offered 1990–91.  
R. G. Calkins.]

**[337 The Medieval Illuminated Book]**

4 credits. Not offered 1990–91.  
R. G. Calkins.]

**[341 Flemish Painting]**

4 credits. Not offered 1990–91.]

**[342 Medieval and German Renaissance Art]**

4 credits. Not offered 1990–91.  
R. G. Calkins.]

**[343 Italian Renaissance of the Fifteenth Century]**

4 credits. Not offered 1990–91.  
C. Lazzaro.]

**344 Italian Renaissance of the Sixteenth Century: Leonardo, Michelangelo, and Raphael**

Spring. 4 credits. Prerequisites: one or more of the following courses: History of Art 240, 245, 343, 350, 351, or permission of the instructor.

T R 10:10–11:25. C. Lazzaro.  
A thorough examination of the works of these three masters and of their cultural and historical environment. Primary emphasis is on their painting, sculpture, and architecture, but the writings of Leonardo and Michelangelo are also considered. Students are expected to discuss reading assignments in class. There will be a prelim and final exam with slides and essays and either two short papers or one long paper.

**[350 The Culture of the Early Renaissance (also Romance Studies 361 and Comparative Literature 361)]**

4 credits. Not offered 1990–91.  
C. Lazzaro.]

**[354 European Painting of the Seventeenth Century]**

4 credits. Not offered 1990–91.]

**[355 Painting and Public Life in Seventeenth-Century Northern Europe]**

4 credits. Not offered 1990–91.]

**[357 European Art of the Eighteenth Century]**

4 credits. Not offered 1990–91.]

**[359 Major Masters of the Graphic Arts]**

4 credits. Not offered 1990–91.

C. Lazzaro.]

**[360 Nineteenth-Century American Art]**

4 credits. Not offered 1990–91.]

**361 Nineteenth-Century European Art**

Fall. 4 credits. Prerequisite: History of Art 245.

M W F 9:05–9:55. L. L. Meixner.

A study of the major movements in nineteenth-century art history: Neo-Classicism, Romanticism, Realism, Impressionism, Post-Impressionism, and Symbolism. The primary artists discussed include Jacques-Louis David, Eugene Delacroix, Francisco Goya, Caspar D. Friedrich, Joseph W. M. Turner, Claude Monet, Vincent van Gogh, and Paul Gauguin. Literary and political developments are examined with respect to the broader cultural contexts of the specific art movements.

**362 European Art 1900–1940**

Spring. 4 credits. Prerequisite: History of Art 260 or 361.

L. L. Meixner.

An examination of the major movements in European art during the first half of the twentieth century: Fauvism, German Expressionism, Cubism and its satellite schools, Dada, and Surrealism. Emphasis will be placed on major artists, including Matisse, Picasso, Kirchner, Kandinsky, and Duchamp. Relevant political background influencing the period is included as well.

**[364 American Art 1900–1940]**

4 credits. Not offered 1990–91.]

**365 Art from 1940 to the Present**

Spring. 4 credits.

T R 11:40–12:55. J. E. Bernstock.  
Major artists and movements in the United States since 1940, beginning with Jackson Pollock and Abstract Expressionism, and continuing through recent developments in art. Attention is devoted to the critical reception that artists have received and to the artists' statements themselves.

**371 Architectural History of Washington, D.C.**

Fall or spring. Variable credit. Only for students in the Cornell-in-Washington program. Only for non-architects.

P. Scott.

A historical and critical survey of the architecture of Washington. Attention will be given to the periods, styles, architects, and clients—public and private—of the notable buildings and to the urban landscape of the nation's capital. The vocabulary of architectural analysis and criticism will be taught. Field trips required.

**[376 Painting and Sculpture in America: 1850–1950]**

4 credits. Not offered 1990–91.  
T. W. Leavitt.]

**[380 Introduction to the Arts of China]**

4 credits. Not offered 1990–91.  
M. W. Young.]

**[381 Buddhist Art in Asia]**

4 credits. Not offered 1990–91.  
S. J. O'Connor.]

**[383 The Arts of Early China]**

4 credits. Not offered 1990–91.  
M. W. Young.]

**[384 The Arts of Japan]**

4 credits. Not offered 1990–91.  
M. W. Young.]



**[385 Chinese Painting]**

4 credits. Not offered 1990–91.  
M. W. Young.]

**[386 Studies in Indian and Southeast Asian Art]**

4 credits. Not offered 1990–91.  
S. J. O'Connor.]

**[388 Architecture and Gardens of Japan]**

4 credits. Not offered 1990–91.]

**[389 Japanese Painting]**

4 credits. Not offered 1990–91.]

**396 The Arts of Southeast Asia**

Spring. 4 credits.  
M W F 11:15–12:05. S. J. O'Connor.

The arts of Southeast Asia will be studied in their social context since in traditional societies art plays a role in most of the salient occasions of life. Special emphasis will be devoted to developments in Cambodia, Thailand, and Bali. Among topics covered will be the shadow puppet theater of Java, ceramics, architecture, and sculpture.

**Seminars**

Courses at the 400 and 500 level are open to upperclass students, majors, and graduate students. All seminars involve the writing and presentation of research papers. Enrollment is limited to 15 students, and permission of the instructor is required. Students may repeat courses that cover a different topic each semester.

**400 Proseminar for Art History Majors: The History and Practice of Art History**

Fall. 4 credits. Prerequisite: History of Art majors only. Enrollment is limited.

M 2:30–4:30. R. G. Calkins.

This seminar, limited to majors in the department, will serve a dual purpose. It will provide intensive training in the skills of visual analysis, critical method, and writing. Five short papers will be assigned, each analyzing a different art form and type of art-historical problem, from connoisseurship and stylistic analysis to research in the social history of art. The course will also provide a basic introduction to the historiography of the field and major writers and modes of inquiry that have been adopted for the study of the visual arts and architecture. Readings will include selections from Heinrich Wölfflin, Roger Fry, Erwin Panofsky, Jacob Rosenberg, and Michael Fried.

**401 Independent Study**

Fall or spring. 2–4 credits. May be repeated for credit. Prerequisite: permission of a department faculty member.

Hours to be arranged. Staff.

Individual investigation and discussion of special topics not covered in the regular course offerings, by arrangement with a member of the department.

**402 Independent Study**

Fall or spring. 2–4 credits. May be repeated for credit. Prerequisite: permission of a department faculty member.

Hours to be arranged. Staff.

Individual investigation and discussion of special topics not covered in the regular course offerings, by arrangement with a member of the department.

**[404 Women Artists (also Women's Studies 404)]**

Fall. 4 credits. Not offered 1990–91.  
J. E. Bernstock.]

**[406 Introduction to Museums]**

2 credits. Not offered 1990–91.  
T. W. Leavitt.]

**407 Seminar on Museum Issues**

Fall. 4 credits. Class will meet in the Herbert F. Johnson Museum of Art. Prerequisite: permission of instructor.

W 2:30–4:30. T. W. Leavitt.

This course will explore the issues, ideas, problems, and opportunities faced by art museums in contemporary American society. The nature of museum research, the theory of museum education, connoisseurship, effective museum leadership, and the role of art museums in American cultural life will be discussed.

**421 History of Art Criticism**

Spring. 4 credits. Prerequisite: permission of the instructor.

W 2:30–4:30. S. J. O'Connor.

An introduction to the work of some of those art critics who had a powerful impact on the way their contemporaries perceived, valued, and discussed art. Representative works will be studied with attention both to the critic's central aesthetic concerns and also to characteristic qualities of argument and expression. Among the critics to be considered will be Fromentin, Reynolds, Ruskin, Pater, Baudelaire, Fry, Bell, and Greenberg.

**[423 Ceramics (also Classics 423 and Archaeology 423)]**

4 credits. Not offered 1990–91.  
A. Ramage.]

**[427 Seminar on Roman Art (also Classics 435)]**

4 credits. Not offered 1990–91.  
J. Whitehead.]

**[431 Greek Sculpture (also Classics 431)]**

4 credits. Not offered 1990–91.  
A. Ramage.]

**[432 Sardis and the Cities of Asia Minor (also Archaeology 432 and Classics 432)]**

4 credits. Not offered 1990–91.  
A. Ramage.]

**[434 The Rise of Classical Greece (also Classics 434)]**

4 credits. Prerequisite: Classics 220 or History of Art 220, Classics 221 or History of Art 221, or permission of instructor. Not offered 1990–91.  
P. Kuniholm.]

**[447 The Artist's Self-Image in the Renaissance and Baroque]**

4 credits. Not offered 1990–91.  
C. Lazzaro.]

**448 Studies in Sixteenth-Century European Art**

Fall. 4 credits. Prerequisite: permission of the instructor.

R 2:30–4:30. C. Lazzaro.

Topic for fall 1990: Concepts of Mannerism. A critical study of the concept of Mannerism and a detailed investigation of several specific paintings, buildings, and other sixteenth-century works that are considered to be Mannerist. Weekly reading assignments will be discussed in class. A term paper on a topic of the student's choice is required. Open to undergraduates with some background in Renaissance art and to graduate students.

**[449 Studies in Italian Renaissance Art]**

Fall. 4 credits. Not offered 1990–91.  
C. Lazzaro.]

**450 Women in Italian Renaissance Art**

Spring. 4 credits. Prerequisite: permission of the instructor.

T 2:30–4:30. C. Lazzaro.

In this seminar, representations of women—biblical and historical heroines, mythological figures, and portraits, primarily in paintings, but also in prints and sculpture—will be examined in their social as well as artistic context. Among the topics to be discussed are: moralizing stories directed at women that are represented on fifteenth-century *cassoni*, or marriage chests, and similar domestic paintings; Italian versions of the popular "power of women" subjects in Northern prints; gender difference in the conventions of Renaissance portraiture; the representation of the female nude; the rise of mythological subjects and male delectation as a function of painting; allegories of chastity, love, and lust in painting and prints; the role of the female in sixteenth-century political allegory.

**[451 Prints of the Fifteenth through the Seventeenth Century]**

4 credits. Not offered 1990–91.  
C. Lazzaro.]

**[456 The Social History of Art: Images of Labor and Problems in the Tradition of European Genre Painting, ca. 1550–1880]**

4 credits. Not offered 1990–91.]

**[459 Caravaggio and Caravaggism in Seventeenth-Century Painting]**

4 credits. Not offered 1990–91.]

**461 Fin-de-siècle Cultures in Europe, England, and America**

Spring. 4 credits. Prerequisite: permission of the instructor. Auditing is not permitted.

W 2:30–4:30. L. L. Meixner.

This seminar poses the question of whether there existed a fin-de-siècle mentality in Europe and America of the 1890s. Artists including Toulouse-Lautrec, Beardsley, and Munch will be studied within the larger literary and social contexts of their day, including popular culture and theatre. Readings and student presentations will emphasize interdisciplinary approaches and research methods ranging from new historicism to psychoanalytical art history. American artists examined will include Albert P. Ryder, John Singer Sargent, Winslow Homer, Thomas Eakins. Utopian novels, the writings of both Henry and William James, and the modern scholarship of T. J. Jackson Lears and Walter Benn Michaels will provide background for discussion.

**462 Barbizon and Impressionist Art in Nineteenth-Century France**

Fall. 4 credits. Prerequisite: permission of the instructor. No auditing permitted.

W 2:30-4:30. L. L. Meixner.

The art of the Barbizon community is of central significance to the development of French painting during the second half of the nineteenth century. This group of painters, who lived in a rural peasant community where they worked out-of-doors, brought both images of labor and landscape into a new era of social conflict. Reflecting the awakened democratic sensibilities of the 1850s, certain artists portrayed the epic quality of rural labor. Others developed new landscape styles. The results were of great importance to the young French Impressionists. The seminar will examine both Barbizon genre and landscape art through the works of Jean-Francois Millet, Theodore Rousseau, Camille Corot, Diaz de la Pena, and others. It will also focus on Claude Monet, Camille Pissarro, and Vincent van Gogh, who were deeply influenced by their Barbizon precursors. Readings and discussions will emphasize recent scholarship that treats Impressionist images from the perspective of social history. Also, the relationships between painters and writers, such as Sand, Zola, Mallarmé, will be explored.

**463 Studies In Modern Art**

Fall. 4 credits. Prerequisite: permission of the instructor. No auditing permitted.

T 2:30-4:30. J. E. Bernstock.

Topic to be announced.

**464 Studies In Modern Art**

Spring. 4 credits. Prerequisite: permission of instructor. Auditing is not permitted.

T 2:30-4:30. J. E. Bernstock.

**[476 Seminar in American Art**

4 credits. Not offered 1990-91.

T. W. Leavitt.]

**[477 Impressionism in America and France**

4 credits. Not offered 1990-91.

L. L. Meixner.]

**[478 Post-Impressionism in France**

4 credits. Not offered 1990-91.

L. L. Meixner.]

**[481 The Arts in Modern China**

4 credits. Not offered 1990-91.

M. W. Young.]

**482 Ceramic Art of China and Southeast Asia**

Fall. 4 credits. Prerequisite: permission of the instructor.

T 2:30-4:30. S. J. O'Connor.

Chinese ceramics were a staple of the traditional trade of Asia for one thousand years. High-fired ceramics were also produced in Thailand and Vietnam to supply the brisk demand in maritime Southeast Asia. The Johnson Museum collection will be studied within the context of trade patterns and trading sites in the South China Seas.

**[483 Chinese Art of the T'ang Dynasty**

4 credits. Not offered 1990-91.

M. W. Young.]

**[484 Studies In Japanese Art and Architecture**

4 credits. Not offered 1990-91.]

**[485 The Ceramic Arts of Japan**

4 credits. Not offered 1990-91.]

**[486 Studies in Chinese Painting**

4 credits. Not offered 1990-91.

M. W. Young.]

**[488 Traditional Arts of Southeast Asia**

4 credits. Not offered 1990-91.

S. J. O'Connor.]

**[491 Japanese Prints**

4 credits. Not offered 1990-91.]

**[531 Problems in Medieval Art and Architecture**

4 credits. Not offered 1990-91.

R. G. Calkins.]

**[540 Seminar in Renaissance Art**

4 credits. Not offered 1990-91.

C. Lazzaro.]

**[550 Seminar in Baroque Art**

4 credits. Not offered 1990-91.]

**[564 Problems in Modern Art: Post-1940 American Art**

4 credits. Not offered 1990-91.]

**[580 Problems in Asian Art**

4 credits. Not offered 1990-91.

S. J. O'Connor.]

**591-592 Supervised Reading**

591, fall; 592, spring. 4 credits. May be repeated for credit. Limited to graduate students.

Staff.

**[595 Methodology Seminar**

4 credits. Not offered 1990-91.

R. G. Calkins.]

**[596 Problems in Art Criticism**

4 credits. Not offered 1990-91.

S. J. O'Connor.]

**600 Honors Work**

Fall or spring. 4 credits. Intended for senior art history majors who have been admitted to the honors program.

Hours to be arranged. Staff.

Basic methods of art historical research will be discussed and individual readings assigned, leading to the selection of an appropriate thesis topic.

**601 Honors Work**

Fall or spring. 4 credits. Prerequisite: History of Art 600.

Hours to be arranged. Staff.

The student under faculty direction will prepare a senior thesis.

**INDONESIAN**

See Department of Modern Languages and Linguistics.

**FALCON Program**

J. U. Wolff, 307 Morrill Hall, 255-0733.

**ITALIAN LANGUAGE AND LINGUISTICS**

See Department of Modern Languages and Linguistics.

**ITALIAN LITERATURE**

See Department of Romance Studies.

**JAPANESE**

See Departments of Asian Studies and Modern Languages and Linguistics.

**JAVANESE**

See Department of Modern Languages and Linguistics.

**KHMER (CAMBODIAN)**

See Department of Modern Languages and Linguistics.

**KNIGHT, JOHN S., WRITING PROGRAM**

See John S. Knight Writing Program, p. 311.

**LATIN**

See Department of Classics.

**LINGUISTICS**

A. Cohn, director of undergraduate studies (216 Morrill Hall, 255-3073).

See Department of Modern Languages and Linguistics.

**MATHEMATICS**

R. K. Dennis, chair; D. Barbasch, B. Barkee, I. Bernstein, L. Billera, J. Bramble, K. Brown, L. Brown, J. Cao, S. Chase, M. Cohen, R. Connelly, R. K. Dennis, R. Durrett, E. Dynkin, C. Earle, R. Farrell, L. Gross, J. Guckenheimer, A. Hatcher, D. Henderson, P. Holmes, J. Hubbard, J. Hwang, P. Kahn, H. Kesten, C. King, D. Kozen, S. Lichtenbaum, R. C. Liu, G. Livesay, M. Morley, A. Nerode, L. Payne, R. Platek, T. Rishel, O. Rothaus, A. Schatz, S. Sen, J. Smillie, R. Shore, B. Speh, F. Spitzer, M. E. Stillman, R. Strichartz, B. Sturmfels, M. Sweedler, K. Vogtmann, L. Wahlbin, J. West, Y. Ye, A. C. Zitronenbaum. (Emeritus: W. Fuchs, A. Rosenberg)

Mathematics is the language of modern science; basic training in the discipline is essential for those who want to understand, as well as for those who want to take part in, the important scientific developments of our time. Acquaintance with mathematics is also extremely useful for students in the social sciences and valuable for anyone interested in the full range of human culture and the ways of knowing the universe in which we live.

The Department of Mathematics faculty has strong groups specializing in algebra, number theory, real and complex analysis, Lie groups, topology and geometry, logic, probability and statistics, mathematical physics, and applied mathematics. Related departments at Cornell have specialists in computer science, operations research, linear programming, and game theory, and courses in these topics can be integrated readily into the mathematics major.

The department offers a rich variety of undergraduate courses, and many of its beginning graduate courses are suitable for advanced undergraduates as well. Under some conditions, a student may carry out an independent reading and research project for college credit under the supervision of a faculty member.

Members of the department are available to discuss with students the appropriate course for their levels of ability and interest, and students are urged to avail themselves of this help.

Students who want to take any of the courses numbered 300 or above are invited to confer, before registering, with the instructor concerned. The level of a course is indicated by the first digit of the course number: roughly, 1, 2, indicate underclass courses; 3, 4, upperclass courses; 5, 6, graduate courses. The subject matter of courses is indicated by the second digit: 0, general; 1, 2, analysis; 3, 4, algebra; 5, 6, topology and geometry; 7, probability and statistics; 8, logic; 9, other.

Midterm grades, when required, will be S or U only, except in special circumstances. In all 600-level courses, in all grades will be S-U only, with the exception of 690. In courses with numbers below 600, students will receive letter grades, with the exception of non-mathematics majors who have requested an S-U grade.

### Advanced Placement

Secondary school students are strongly urged to take one of the two advanced placement examinations of the College Entrance Examination Board in their senior year. Freshmen who have had some calculus but who have not taken an advanced placement examination should take the placement examination in mathematics offered at Cornell just before the beginning of classes in the fall. It is most important that anyone with any knowledge of calculus carefully read "Advanced Placement of Freshmen," p. 6.

### The Major

The mathematics major adapts to a number of purposes. It can emphasize the theoretical or the applied. It can be appropriate for professionals and nonprofessionals alike. It can be broad or narrow. Questions concerning the major should be brought to a departmental representative.

For students interested in secondary school teaching there are several programs available, including a five-year B.S./M.A.T. program. These programs are administered jointly by the departments of Education and Mathematics. For more information, contact Professors D. Henderson or A. Solomon (mathematics), or Professors J. Confrey or J. Volmink (education).

**Prerequisites:** The preferred prerequisites are Mathematics 221–222 or 293–294. A unit on infinite series is required. Such a unit is offered in Mathematics 112, 122, and 192. Normally

students will be admitted to the major only when they have grades of B– or better in all sophomore-level mathematics courses they have taken. Alternative prerequisites are Mathematics 213, 231, normally with grades of B+ or better.

### Requirements

There are five requirements for the major:

- 1) Computer Science 100 Students are urged to take this course before the end of the sophomore year
- 2) Two courses in algebra. Eligible courses are Mathematics 431 or 433, 432 or 434 or 332, 336.
- 3) Two courses in analysis. Eligible courses are Mathematics 411 or 413, 412 or 414, 418, 421, 422, 423.
- 4) Further high-level mathematical courses. Any one of the following is sufficient:
  - a) three mathematics courses numbered 371 or higher, other than those used to satisfy the previous two requirements. Computer Science 621 and/or 622 may also be used toward satisfying this requirement.
  - b) four Computer Science courses numbered 310 or higher.
  - c) four Operations Research and Industrial Engineering courses numbered 320 to 383 or 431 to 472, but not 350.
- 5) One course dealing with mathematical models. Any one of the following is sufficient:
  - a) Mathematics 305 (not offered every year).
  - b) Physics 208, 213, or 217.
  - c) Computer Science 211, provided no Computer Science course has been used toward satisfying the previous requirement.
  - d) One course other than Physics 112 or 207 from outside mathematics with serious mathematical content and dealing with scientific matters, provided the course has not been used toward satisfying the previous requirement.

Major advisers can alter these requirements upon request of an advisee, provided the intent of the requirements is met.

### Sample Major Programs

Below are some suggestions for what the schedule of a student with a mathematics major might look like. Many variations are possible.

**For Graduate School in Mathematics**

First two years: Mathematics 111–122–221–222, Computer Science 100, Physics 207–208.

Last two years: Mathematics 433–434, 413–414, 453–454; two of 418, 428, 471.

The sophomore courses Mathematics 221–222 are more suitable than 293–294 in this case. A student planning to enter graduate school may get by with 411–412 and 431–432 instead of the honors versions 413–414 and 433–434, but the honors versions are strongly recommended.

**For Many Technical Careers**

First two years: Mathematics 111–122–221–222 or 191–192–293–294, Computer Science 100–211, Physics 112–213 or 207–208.

Last two years: Mathematics 431–336, 421–422, 428, 471–472.

Two or more semesters of computer science are highly recommended.

**For Emphasis on Computer Science**

First two years: Mathematics 111–122–221–222, Computer Science 100–211.

Last two years: Mathematics 431–432, 421–422, Computer Science 314, 381, 410, 414, 421.

Requirement 5 is met by Computer Science 381 in this sample program. Students interested in computer science should give consideration to a double major in mathematics and computer science.

**For Emphasis on Operations Research**

First two years: Mathematics 111–122–221–222 or 191–192–293–294, Computer Science 100–211.

Last two years: Mathematics 431–432, 421–422, 471; Operations Research and Industrial Engineering 320, 321, 361, two of 431, 432, 435, and possibly 462 or 471.

**For Prelaw or Premed (first example)**

First two years: Mathematics 111–122–221–222, Computer Science 100, Physics 207–208.

Last two years: Mathematics 431–336, 411–421, 381, 471–472.

The sophomore courses Mathematics 221–222 are recommended rather than 293–294 in this sample because they provide better preparation for 411.

**For Prelaw or Premed (second example) or Prebusiness**

First two years: Mathematics 111–112–213–231, Computer Science 100–211

Last two years: Mathematics 332–336, two of 411–421–418, and also 381, 403, 451.

A course in statistics is also strongly recommended.

**For Secondary School Teachers**

First two years: Mathematics 111–122–221–222–305, Computer Science 100.

Last two years: Mathematics 431–336, 411–421, 451, 403, 471, 408.

**Honors.** Honors in mathematics will be awarded on the basis of a high level of performance in departmental courses. Further requirements, if any, will be announced during the year.

### Distribution Requirement

The distribution requirement is satisfied in mathematics by any 6 credits, not including more than one course from Mathematics 105 or 403. Computer Science 100 may be used for three of these credits. The mathematics distribution requirement is also satisfied by a score of 3 or higher on the CEEB calculus BC examination. Mathematics 109 or ALS 115 (College of Agriculture and Life Sciences) may not be used to satisfy the requirement.

## Basic Sequences

### Precalculus

Description	Course Numbers
1) Algebra and trigonometry to prepare students for calculus	Mathematics 109* or Agriculture and Life Sciences 5*
2) Algebra, analytic geometry, elements of calculus	Agriculture and Life Sciences 115**

\*Mathematics 109 and ALS 5 do not carry credit for graduation.

\*\*Students who want a second semester of mathematics after ALS 115 may take Mathematics 105 or if they need more calculus, 111.

### Calculus

Description	Mathematics Course Numbers
1) Standard three-semester sequence for students who do not expect to take advanced courses in mathematics	111-112-213
2) Usual sequence for prospective mathematics majors and others who expect to take advanced courses in mathematics	111-122-221-222
3) Calculus for engineers (also taken by some physical science majors)	191-192-293-294

Mathematics 191 may be substituted for 111 in sequences 1 and 2. Sequences 2 and 3 are two-year sequences that include some linear algebra.

Students who take sequence 1 may learn some linear algebra by taking Mathematics 231. A student whose performance in 112 is exceptional may switch to sequence 2 and take 221.

### Special-Purpose Sequences

Description	Mathematics Course Numbers
1) Finite mathematics and calculus for biology majors	105-106
2) Other possible finite mathematics and calculus sequence	105-111

Students who want to take two semesters of calculus are advised to take the first two semesters of one of the three calculus sequences. It is also possible to follow Mathematics 106 with 112 or 122.

*Switching between calculus sequences is often difficult, especially at the 200-level. Students should not attempt such a switch without consulting the associate chair.*

## Courses with Overlapping Content

Because the department offers many courses with overlapping content, students must choose their courses carefully to ensure that they will receive credit for each course they take. Listed below are groups of courses with similar content. Students will receive credit for only one of the courses in each group.

106, 111, 191	213 and 294
112, 122, and 192	213 and 222
231	221, 294, and 332
132 and 332	332 and 432
213 and 293	372 and 472

### Fees

In some courses there may be a small fee for photocopying materials to be handed out to students.

## Basic Sequences

### 105 Finite Mathematics for Biologists (also Theoretical and Applied Mechanics 105)

Fall or summer. 3 credits. Prerequisite: three years of high school mathematics, including trigonometry and logarithms.\*

Lecs, T R 12:20, plus 2 hours to be arranged. Prelims: 7:30 p.m., Sept. 24, Nov. 1, Dec. 6.

Mathematical modeling, sets, functions, and graphing (including use of log and semi-log paper). Probability (with some applications to genetics). Matrices, systems of linear equations, and Markov chains. Examples from biology are used.

### 106 Calculus for Biologists (also Theoretical and Applied Mechanics 106)

Spring. 3 credits. Prerequisite: Mathematics 105 or 109 or ALS 115 or permission of instructor. (A strong background in functions is required.) Mathematics 111, rather than 106, is recommended for those planning to take 112.\*

Lecs, T R 11:15, plus 2 hours to be arranged. Prelims: 7:30 p.m., Feb. 19, Mar. 28, Apr. 25.

Introduction to differential and integral calculus, partial derivatives, elementary differential equations. Examples from biology are used.

### 109 Precalculus Mathematics

Summer. 3 transcript credits only; cannot be used toward graduation.

M-F 8:30.

This course is designed to prepare students for Mathematics 111. Algebra, trigonometry, logarithms, and exponentials are reviewed.

### 111 Calculus

Fall, spring, or summer. 4 credits. Limited to 22 students a section. Prerequisite: Mathematics 109 or three years of high school mathematics, including trigonometry.\*

Hours to be arranged. Prelims: fall, 7:30 p.m., Oct. 2, Nov. 1, Nov. 29; spring, 7:30 p.m., Feb. 19, Mar. 21, Apr. 25.

Plane analytic geometry, differentiation and integration of algebraic and trigonometric functions, applications of differentiation, logarithmic and exponential functions. One section will be taught experimentally with use of computers in fall term.

\*See the list of courses with overlapping content at the end of the introduction.

### 112 Calculus

Fall, spring, or summer. 4 credits. Limited to 22 students a section. Prerequisites: Mathematics 106 or 111 with a grade of C or better. Those who do extremely well in Mathematics 111 should take 122 instead of 112, unless they plan to continue with 213.\*

Hours to be arranged. Prelims: fall, 7:30 p.m., Oct. 2, Nov. 1, Dec. 6; spring, 7:30 p.m., Feb. 19, Mar. 28, Apr. 25.

Methods and applications of integration, plane curves and polar coordinates, vectors and solid analytic geometry, introduction to partial derivatives. One section will be taught experimentally with use of computers in spring term.

### 122 Calculus

Fall or spring. 4 credits. Prerequisite: performance at a high level in Mathematics 111 or permission of the department. Students planning to continue with Mathematics 213 are advised to take 112 instead of this course.\*

Fall: M W F 10:10 or 11:15, plus one hour to be arranged. Spring: M W F 11:15 or 12:20, plus one hour to be arranged. Prelims: fall, 7:30 p.m., Oct. 2, Nov. 1, Dec. 6; spring, 7:30 p.m., Feb. 19, Mar. 28, Apr. 25.

Differentiation and integration of elementary transcendental functions, the techniques of integration, applications, polar coordinates, infinite series, and complex numbers, as well as an introduction to proving theorems. The approach is more theoretical than in Mathematics 112.

### 191 Calculus for Engineers

Fall. 4 credits. Prerequisite: three years of high school mathematics, including trigonometry.

Lecs, M W F 9:05 or 11:15, plus 2 hours to be arranged. Prelims: 7:30 p.m., Oct. 4, Nov. 1, Dec. 6.

Plane analytic geometry, differential and integral calculus, and applications.

### 192 Calculus for Engineers

Fall, spring, or summer. 4 credits. Prerequisite: Mathematics 191.

Fall: lec, M W F 9:05 or 11:15, plus 2 hours to be arranged. Spring: lec, M W F 9:05 or 11:15, plus 2 hours to be arranged. Prelims: fall, 7:30 p.m., Oct. 4, Nov. 1, Dec. 6; spring, 7:30 p.m., Feb. 19, Mar. 28, Apr. 25.

Methods of integration, hyperbolic functions, polar coordinates, infinite series, complex numbers, introduction to partial derivatives, introduction to surface and volume integrals.

### 213 Calculus

Fall, spring, or summer. 4 credits. Prerequisite: Mathematics 112, 122, or 192.

Lecs M W F 10:10, plus 2 hours to be arranged. Prelims: fall, 7:30 p.m., Nov. 8, Nov. 29; spring, 7:30 p.m., Feb. 21, Apr. 2.

Vectors, vector-valued functions, line integrals. Multivariable calculus, multiple integrals. First- and second-order differential equations with applications. Introduction to numerical methods, series solutions, systems of differential equations, elementary partial differential equations.

\*See the list of courses with overlapping content at the end of the introduction.



## 221 Linear Algebra and Calculus

Fall or spring. 4 credits. Prerequisite: Mathematics 122 with a grade of B or better, or permission of instructor.

Fall: M W F 8, 9:05, 10:10, or 11:15, plus one hour to be arranged. Spring M W F 10:10 or 11:15, plus one hour to be arranged. Prelims: fall, 7:30 p.m., Sep. 27, Nov. 1, Dec. 6; spring, 7:30 p.m., Feb. 21, Mar. 26, Apr. 30.

Linear algebra and differential equations. Topics include vector algebra, linear transformations, matrices, linear differential equations, as well as an introduction to proving theorems.

## 222 Calculus

Fall or spring. 4 credits. Prerequisite: Mathematics 221.

Fall: M W F 11:15 or 12:20, plus one hour to be arranged. Spring: M W F 9:05 or 10:10 or 11:15, plus one hour to be arranged.

Vector differential calculus, calculus of functions of several variables, multiple integrals.

## 293 Engineering Mathematics

Fall, spring, or summer. 4 credits. Prerequisites: Mathematics 192 plus a knowledge of computer programming equivalent to that taught in Engineering Common Courses 105. In exceptional circumstances, Mathematics 192 and 293 may be taken concurrently.

Fall: lec, M W 10:10, 11:15, or 12:20, plus one hour to be arranged, plus four three-hour computer labs during the semester. Spring: lec, M W 10:10 or 12:20, plus one hour to be arranged, plus four three-hour computer labs during the semester. Prelims: fall, 7:30 p.m., Sept. 27, Nov. 1, Nov. 29; spring: 7:30 p.m., Feb. 21, Mar. 26, Apr. 30.

Introduction to physical vectors, linear algebra and matrix theory, inner product spaces. Includes microcomputer use in solving problems.

## 294 Engineering Mathematics

Fall, spring, or summer. 4 credits. Prerequisite: Mathematics 293.\*

Fall: lec, M W 10:10 or 12:20, plus one hour to be arranged, plus four three-hour computer labs during the semester. Spring: lec, 10:10, 11:15, or 12:20, plus one hour to be arranged, plus four three-hour computer labs during the semester. Prelims: fall, 7:30 p.m., Sept. 27, Nov. 1, Nov. 29; spring, 7:30 p.m., Feb. 21, Mar. 26, Apr. 30.

Systems of linear ordinary differential equations, introduction to ordinary differential equations. Vector fields and vector calculus. Boundary-value problems and introduction to Fourier series. Includes microcomputer use in solving problems.

## General Courses

### 101 History of Mathematics

Summer. 4 credits. Prerequisite: three years of high school mathematics. The history of the main ideas of mathematics from Babylonian, Egyptian, and Greek times to the present day.

\*See the list of courses with overlapping content at the end of the introduction.

## 103 Mathematical Explorations

Fall. 3 credits. Limited to 15 students. This course may be used to satisfy the distribution requirement in mathematics.

Lecs, T R 8:40.

This course is for students who wish to experience how mathematical ideas naturally evolve; especially for students who have not yet found mathematics to be a world in which they move comfortably. The homework will consist in the students actively investigating mathematical ideas such as the nature of infinity and geometric reality and the ideas leading to calculus. The course will emphasize ideas and imagination as opposed to techniques and calculations.

## [104 Mathematics and Art

Fall. 3 credits. Limited to 12 students. Does not satisfy the mathematics distribution requirement; for graduation credit only. Not offered 1990-91.

The impact of mathematical ideas on the arts and the impact of the arts on mathematical ideas through the ages, with a special emphasis on theories of perspective in the visual arts. The course will be cooperatively taught by a mathematician and an art historian. There will be both mathematical and artistic assignments based on the theories, and assignments of readings from the original texts.]

## [117 Foundations of Calculus

3 credits. Limited to 18 students. Not offered 1990-91. Prerequisite: Mathematics 111 or 106 or equivalent. May be used toward the mathematics distribution requirement.

Intended either for nonscientists who will not need the conventional second-semester calculus course or for future math or science majors who would like to deepen their understanding before going on in calculus. This course delves into the questions concerning limits and infinite processes that puzzled scholars for over two thousand years. Students study anew the real number system, the theory of limits, continuity, differentials, derivatives, and the definite integral. The pedagogical method is partly historical, viewing the development of these interlocked topics from the time of the ancient Greeks (Zeno's paradoxes, the discovery of irrationals, Eudoxus' Method of Exhaustion, and the work of Archimedes) through the seventeenth-century work of Fermat, Newton, and Leibniz and into modern times. Readings of excerpts from original manuscripts are compared with the descriptions of the same material given in a standard beginning calculus book.]

## 123 Analytic Geometry and Calculus

Summer. 4 credits. Prerequisite: High school mathematics through trigonometry and plane analytic geometry.

The honors section of Math 111. Covers the same topics more deeply (at the level of Apostol's *Calculus*).

## [150 From Space to Geometry

Spring. 4 credits. Enrollment limited to 18 students. Not offered 1990-91.

Over the centuries mathematicians have interpreted the concept of "space" in numerous ways. This course will survey some of these approaches from the time of Euclid to the later perspective of non-Euclidean systems. We will evaluate the impact of these viewpoints on such concepts as distance, angle measurement, straightness and curvature, dimension, and surface. We will make and analyze models to get a feel for the concepts and to assess the relevance of various approaches to geometry.]

## [151 The Geometry of Tilings, Polyhedra, and Structural Engineering

Spring. 3 credits. Limited to 15 students. Not offered 1990-91.

An introduction to topics in geometry, including the classification of tilings by the group of symmetries that act on them, examples of artists such as Escher, the aperiodic tilings of R. Penrose, the study of polyhedra, Euler's formula, regular polyhedra, linkages that draw straight lines, "Buckminster Fuller's" geodesic domes, and tensegrities. Emphasis will be on the geometric ideas involved, with formal proofs studied only as needed for overall understanding.]

## 200 Basic Concepts of Mathematics

Summer. 3 credits. Prerequisite: a good knowledge of high school mathematics, including trigonometry.

Discussion of basic ideas in mathematics drawn from algebra and topology. An example of the problems treated is the proof of the impossibility of trisecting an angle by ruler and compass. Suitable for teachers, prospective teachers, and high school students with a strong interest in mathematics.

## 227 Mathematical Model Modeling

Spring. 4 credits. Limited to 25 students.

Prerequisite: Mathematics 111 or 106 or equivalent. May be used to satisfy the mathematics distribution requirement. Not intended for upperclass science majors. Mathematical modeling is the process of bringing mathematical methods to bear on problems arising in the real world. In this course students will study selected mathematical models, learn general modeling techniques, and gain experience in constructing original mathematical models and comparing their predictions with reality, both to appreciate the usefulness of mathematical models and to be aware of their limitations.

## [305 Mathematics in the Real World

Summer. 4 credits. Not offered 1990-91.

Selected uses of mathematics to solve current relevant problems; illustration of, and active student involvement in, the complete applied mathematical methodology.]

## 403 History of Mathematics

Spring. 4 credits. Prerequisites: two courses in mathematics above 300, or permission of instructor.

T R 1:25-2:40.

Survey of the development of mathematics from antiquity to the present, with an emphasis on the achievements, problems, and mathematical viewpoints of each historical period and the evolution of such basic concepts as number, geometry, construction, and proof. Readings from original sources in translation. Students will be required to give oral and written reports.

## 408 Mathematics in Perspective

Spring. 4 credits. Prerequisite: consent of instructor (intended for senior mathematics majors and other students with strong mathematics backgrounds).

The purpose of this course is for students to step back and to form an overview of the mathematics which they have learned.

## 490 Supervised Reading and Research

Fall, spring, or summer. 1-6 credits.

Supervised reading and research by arrangement with individual professors. Not applicable for material currently available in regularly scheduled courses.

**508 Mathematics for Secondary School Teachers**

Fall, spring, or summer. 1–6 credits. Prerequisite: secondary school mathematics teacher, graduate standing, or permission of instructor. May not be taught every semester. An examination of the principles underlying the content of the secondary school mathematics curriculum, including connections with the history of mathematics and current mathematics research.

**690 Supervised Reading and Research**  
Variable credit (maximum 6 each term).**Analysis****411–412 Introduction to Analysis**

411, fall; 412, spring. 4 credits each term. Prerequisite: Mathematics 222. Students who need measure theory and Lebesgue integration for advanced probability courses should take Mathematics 413–414 or arrange to audit the first few weeks of Mathematics 521. Undergraduates who plan to attend graduate school in mathematics should take 413–414.

T R 8:40–9:55.

An introduction to the theory of functions of real variables, stressing rigorous logical development of the subject rather than technique of applications. Topics include Euclidean spaces, the real number system, continuous and differentiable functions, Riemann integral, uniform convergence and approximation theorems, Fourier series, calculus in several variables, and differential forms.

**413–414 Introduction to Analysis**

413, fall; 414, spring. 4 credits each. Prerequisite: Mathematics 222.

413: T R 8:40 or 10:10; Prelims: 7:30 p.m., Oct. 16, Nov. 27. 414: T R 8:40.

Honors version of Mathematics 411–412. Metric spaces are included in Mathematics 413, and 413 proceeds at a faster pace than 411. The second semester includes an introduction to the Lebesgue integral.

**418 Introduction to the Theory of Functions of One Complex Variable**

Spring. 4 credits. Prerequisite: Mathematics 222 or 294 or 213. May be offered only in alternate years.

T R 1:25–2:40.

A rigorous introduction to complex variable theory. Complex numbers. Differential and integral calculus for functions of a complex variable, including Cauchy's theorem and the calculus of residues. Elements of conformal mapping.

**Applied Mathematics and Differential Equations****421 Applicable Mathematics**

Fall, spring, or summer. 4 credits. Prerequisites: high level of performance in Mathematics 294, or 221 and 222, or 213 and 231. Graduate students who need mathematics extensively in their work and who have had a solid advanced calculus course and complex variables course as undergraduates should take Mathematics 515–516. With less preparation, they should take Mathematics 421–422–423.

T W R F 9:05 or 12:20. Prelims: fall, 7:30 p.m., Oct. 16, Nov. 27; spring, 7:30 p.m., Mar. 5, Apr. 18.

Theorems of Stokes, Green, Gauss, etc. Sequences and infinite series. Fourier series and orthogonal functions. Ordinary differential

equations. Solution of partial differential equations by separation of variables.

**422 Applicable Mathematics**

Fall, spring, or summer. 4 credits. Prerequisite: Mathematics 421.

T W R F 12:20. Prelims: fall, 7:30 p.m., Oct. 16, Nov. 27; spring, 7:30 p.m., Mar. 6, Apr. 18.

Complex variables Fourier transforms, Laplace transforms. An introduction to generalized functions. Applications to partial differential equations.

**423 Applicable Mathematics**

Fall or spring. 4 credits. Prerequisite: Mathematics 421; however, students who have not taken 422 should talk to the instructor before taking this course.

T W R F 12:20. Prelims: fall, 7:30 p.m., Oct. 16, Nov. 27; spring, 7:30 p.m., Mar. 5, Apr. 18.

Normed vector spaces. Elementary Hilbert space theory. Projections. Fredholm's alternative. Eigenfunction expansions. Applications to elliptic partial differential equations and to integral equations.

**425 Numerical Solutions of Differential Equations**

Spring. 4 credits. Prerequisites: Mathematics 222 or 294, one course numbered 300 or higher in mathematics, and Computer Science 321, or permission of instructor. This course is a natural sequel to Computer Science 321. Methods and basic theory for the numerical solution of ordinary and partial differential equations. Linear multistep methods, Runge-Kutta methods, and the problem of stiffness for ordinary differential equations. Finite difference methods and Galerkin finite element methods for partial differential equations. Homework will involve use of a computer.

**427 Introduction to Ordinary Differential Equations**

Fall. 4 credits. Prerequisite: Mathematics 222 or 294 or permission of instructor.

T R 8:40.

Covers the basic existence, uniqueness, and stability theory together with methods of solution and methods of approximation. Topics include singular points, series solutions, Sturm-Liouville theory, transform methods, approximation methods, and application to physical problems.

**428 Introduction to Partial Differential Equations**

Spring. 4 credits. Prerequisite: Mathematics 222 or 294 or permission of instructor.

T R 10:10–11:25.

Topics selected from first-order quasilinear equations, classification of second-order equations, with emphasis on maximum principles, existence, uniqueness, stability Fourier series methods, approximation methods.

**Algebra****231 Linear Algebra**

Spring or summer. 3 credits. Prerequisite: Mathematics 111 or equivalent.\*

M W F 10:10. Prelims: spring, Feb. 21, Mar. 26, Apr. 30.

Vectors, matrices, and linear transformations, affine and Euclidean spaces, transformation of matrices, and eigenvalues.

\*See the list of courses with overlapping content at the end of the introduction.

**332 Algebra and Number Theory**

Fall. 4 credits. Prerequisites: one year of calculus and one course from Mathematics 221, 231, and 294. Mathematics 332 does not satisfy prerequisites for courses numbered 500 and above.

M W F 9:05.

Various topics from modern algebra and number theory, usually including rings, fields, and finite groups. Motivation and examples are derived mostly from geometry, arithmetic, and congruence problems on the integers.

**336 Applicable Algebra**

Fall or spring. 4 credits. Prerequisites: Mathematics 221, 294, or 231.

Fall: M W F 10:10; spring: M W F 9:05.

An introduction to concepts and methods of abstract algebra that are of importance in science and engineering. Applications of the theory to concrete problems will be stressed. Each year the course will treat aspects usually chosen from the following topics: partially ordered sets, lattices, graph theory, and Boolean algebras; finite machines and languages; applications of groups, fields, and modular arithmetic, such as Latin squares, elementary coding theory, or fast Fourier transform; difference equations. Additional topics may be chosen by the instructor.

**431–432 Introduction to Algebra**

431, fall or spring or summer; 432, spring. 4 credits each. Prerequisite: Mathematics 221 or 231. Undergraduates who plan to attend graduate school in mathematics should take 433–434.

431: Fall: M W F 10:10; spring: M W F 9:05. 432: M W F 10:10.

431: An introduction to linear algebra, including the study of vector spaces, linear transformations, matrices, and systems of linear equations; quadratic forms and inner product spaces; canonical forms for various classes of matrices and linear transformations; determinants. 432: an introduction to various topics in abstract algebra, including groups, rings, fields, factorization of polynomials and integers, congruences, and the structure of finitely generated modules over Euclidean domains with application to canonical forms of matrices.

**433–434 Introduction to Algebra**

433, fall; 434, spring. 4 credits each. Prerequisite: Mathematics 221 or 231.

M W F 10:10.

Honors version of Mathematics 431–432. Mathematics 433–434 will be more theoretical and rigorous than 431–432 and will include additional material such as multilinear and exterior algebra.

**Geometry and Topology****451–452 Classical Geometries**

451, fall or summer; 452, spring. 4 credits each term. Prerequisite: Mathematics 221 or 231 or permission of instructor. 451 is not usually a prerequisite for 452.

Fall: T R 2:55; spring: M W F 9:05.

Foundations of geometry. Various geometric topics, including Euclidean, non-Euclidean, and projective geometry and rigidity theory.

### 453 Introduction to Topology

Fall. 4 credits. Prerequisites: Mathematics 411 and 221, or permission of instructor.

M W F 11:15.

Basic point set topology, connectedness, compactness, metric spaces, fundamental group. Application of these concepts to surfaces such as the torus, the Klein bottle, the Moebius band.

### 454 Introduction to Differential Geometry

Spring. 4 credits. Prerequisites: Mathematics 222 or 294, plus at least one mathematics course numbered 300 or above. Mathematics 453 is not a prerequisite.

M W F 11:15.

Differential geometry of curves and surfaces. Curvature, geodesics, differential forms. Introduction to  $n$ -dimensional Riemannian manifolds. This material provides some background for the study of general relativity; connections with the latter will be indicated.

## Probability and Statistics

### 171 Statistical Theory and Application in the Real World

Spring. 4 credits. Prerequisites: high school mathematics.

Lecs: 3 hours (to be arranged; lab one hour (to be arranged)).

This introductory statistics course will discuss techniques for analyzing data occurring in the real world and the mathematical and philosophical justification for these techniques. Topics include population and sample distributions, central limit theorem, and statistical theories of point estimation, confidence intervals, and testing hypotheses, the linear model, and the least squared estimator. The course concludes with a discussion of tests and estimates for regression and analysis of variance (if time permits). The computer will be used to demonstrate some aspects of the theory, such as sampling distributions and the Central Limit Theorem. In the lab portion of the course, students will learn and use computer-based methods for implementing the statistical methodology presented in the lectures. (No previous familiarity with the computer is presumed.)

### 372 Elementary Statistics

Fall. 4 credits. Prerequisites: one year of calculus, and Computer Science 100 or 101 or 108 or permission of instructor. A terminal course for students who will take no further courses in statistics.\*

M W F 9:05. Evening prelims may be given.

Introduction to the principles underlying modern statistical inference, to the practical application of statistical techniques, and to the rationale underlying the choice of statistical methods in various situations. Topics in probability that are essential to an understanding of statistics. Homework involves statistical analysis of data sets on hand calculators and on a computer by means of packaged programs.

\*See the list of courses with overlapping content at the end of the introduction.

### 471 Basic Probability

Fall. 4 credits. Prerequisite: Mathematics 221. May be used as a terminal course in basic probability. Intended primarily for those who will continue with Mathematics 472.

Lecs, M W F 11:15; rec, R 12:20. Prelims: 7:30 p.m., Oct. 16, Nov. 27.

Topics include combinations, important probability laws, expectations, moments, moment-generating functions, limit theorems. Emphasis is on diverse applications and on development of use in statistical applications. See also the description of Mathematics 571.

### 472 Statistics

Spring. 4 credits. Prerequisite: Mathematics 471 and knowledge of linear algebra such as taught in Mathematics 221. Some knowledge of multivariate calculus helpful but not necessary.\*

M W F 9:05. Prelims: 7:30 p.m., Mar. 5, Apr. 18.

Classical and recently developed statistical procedures are discussed in a framework that emphasizes the basic principles of statistical inference and the rationale underlying the choice of these procedures in various settings. These settings include problems of estimation, hypothesis testing, large sample theory.

### [473 Further Topics in Statistics

Fall. 4 credits. Prerequisite: Mathematics 472 or 574. Not offered 1990-91.

M W F 11:15.

More detailed discussion of some of the topics not covered at length in Mathematics 472. Design and analysis of experiments. Multivariate analysis. Nonparametric inference; robustness. Sequential analysis. For corresponding subject matter taught in more detail, see description of Mathematics 573 and 675.]

## Mathematical Logic

### 481 Mathematical Logic

Fall. 4 credits. Prerequisite: Mathematics 221. Propositional and predicate logic. Classical proof procedures. Completeness and compactness. Decidability and undecidability. The Godel incompleteness theorem. Elements of set theory.

### 483 Intensional Logics and Alternatives to Classical Logics (also Philosophy 436)

Spring. Prerequisite: Philosophy 231 or equivalent or any mathematics or computer science logic course or permission of instructor.

Topics: (1) The abstract concept of consequence. What makes a logic intensional? (2) Sentential logics: soundness and completeness for some normal modal and tense logics, intuitionistic logic, the Stalnaker, D. Lewis, and Adams conditionals; incomplete modal logics; the correspondence problem. (3) Predicate (first-order) logics: soundness and completeness for classical free logic and some normal modal logics; the Barcan and converse-Barcan schemes; actuality and two-dimensional semantics; the interpolation problem. (4) Time permitting, topics from among the following: non-normal modal logics; additional semantics for intuitionistic logic; 3-valued logics; individual-actualism; higher-order logics, dynamic logic; auto-epistemic logic and non-monotone inference; decision problems associated with some of these logics.

\*See the list of courses with overlapping content at the end of the introduction.

### 486 Applied Logic (also Computer Science 486)

Fall or summer. 4 credits. Prerequisites: Mathematics 222 or 294, Computer Science 100, and some additional course in mathematics or Computer Science 381.

T R 10:10-11:25, plus one-hour lab to be arranged.

Propositional and predicate logic, compactness and completeness by tableaux. Equational logic. Herbrand Universes, the resolution method, and unification. Rewrite rules and equational logic. Knuth-Bendix method and the congruence closure algorithm and lambda-calculus reduction strategies. Restrictions on resolution and their completeness. Introduction to automatic theorem proving. Topics in Prolog, Lisp, or ML on microcomputers or, possibly, exposure to a larger system such as Nuprl. Input resolution and Prolog. Applications to expert systems and program verification.

### [487 Applied Logic II

Spring. 4 credits. Prerequisite: Mathematics 221 or equivalent. Not offered 1990-91. Intuitionistic propositional and predicate logic. Natural deduction and tableaux as proof procedures. Curry partial application structures. Their polynomial extensions as lambda calculi. Typed and untyped lambda calculi, cartesian closed categories. Heyting semantics of constructions as interpretations in partial combinatory structures, Kleene realizabilities. Curry-Howard isomorphisms. Intuitionistic first order arithmetic and Godel's system T. Intuitionistic higher order logic and polymorphism. Weak and strong normalizations for simple and polymorphic calculi. Application to consistency proofs. Term extraction as the context for understanding compilers and interpreters for applicative languages such as LISP, NUPRL, MIRANDA, etc.]

## Graduate Courses

Students interested in taking graduate courses in mathematics should consult the department for further course details, times, and possible changes in courses as described below.

### [503 History of Mathematics

4 credits. Prerequisites: Mathematics 511 and 531. Intended for graduate students in the mathematical sciences. Not offered 1990-91. This course will be devoted to the history of mathematics in the nineteenth century from the original sources, with emphasis on the history of the foundations of analysis and of the foundations of commutative algebra. Typical authors in algebra who will be studied are Lagrange, Ruffini, Gauss, Abel, Galois, Dirichlet, Kummer, Kronecker, Dedekind, Weber, M. Noether, Hilbert, Steinitz, Artin, and E. Noether. Typical authors in analysis who will be studied are Cauchy, Fourier, Bolzano, Dirichlet, Riemann, Weierstrass, Heine, Cantor, Peano, and Hilbert. If time permits, a sketch will be given of the history of probability and statistics from Bernoulli to Pearson. Students will be required to read and explain one important nineteenth-century paper.]

### 511-512 Real and Complex Analysis

511, fall; 512, spring.  
511: measure and integration, functional analysis. 512: complex analysis, Fourier analysis, and distribution theory.

### 513-514 Topics in Analysis

513, fall; 514, spring.

**515-516 Mathematical Methods in Physics**

515, fall; 516, spring. 4 credits each. Intended for graduate students in physics or related fields who have had a strong advanced calculus course and at least two years of general physics. A knowledge of the elements of finite dimensional vector space theory, complex variables, separation of variables in partial differential equations, and Fourier series will be assumed. The course overlaps with parts of Mathematics 421-422-423. Undergraduates will be admitted only with permission of instructor. Mathematics 515 is a prerequisite for 516.

M W F 12:20-1:25.

Topics designed to give a working knowledge of the principal mathematical methods used in advanced physics. A brief discussion of some basic notions: metric space, vector space, linearity, continuity, integration. Generalized functions (Schwartz distributions). Fourier series and Fourier integrals. Saddle point method. Linear operators. Differential operators and integral operators, the equations and eigenvalue problems connected with them and the special functions arising from them. Elements of group theory. The rotation group and its representations.

**517 Dynamical Systems**

Fall. Not offered 1990-91.

Topics: Existence and Uniqueness Theorems for ODEs. Poincaré-Bendixon theorem and global properties of two dimensional flows. Limit sets, non-wandering sets, chain recurrence, pseudo-orbits and structural stability. Linearization at equilibrium points: stable manifold theorem and the Hartman-Grobman theorem. Generic properties: transversality theorem and the Kupka-Smale theorem. Examples: expanding maps and Anosov diffeomorphisms. Hyperbolicity: the horseshoe and the Birkhoff-Smale theorem on transversal homoclinic orbits. Rotation numbers: Herman's theorem. Characterization of structurally stable systems.]

**[518 Smooth Ergodic Theory**

Spring. Not offered 1990-91.

Topics: Invariant measures. Entropy. Hausdorff dimension and related concepts. Hyperbolic invariant sets: Stable manifolds, Markov partitions and symbolic dynamics. Equilibrium measures of hyperbolic attractors. Ergodic theorems. Pesin theory: stable manifolds of non-hyperbolic systems. Liapunov exponents: relations between entropy, exponents and dimensions.]

**519-520 Partial Differential Equations**

519, fall; 520, spring.

Basic theory of partial differential equations.

**521 Measure Theory and Lebesgue Integration**

Fall.

Measure theory, integration, and  $L_p$  spaces.

**522 Applied Functional Analysis**

Spring.

Spectral theorem for bounded operators, spectral theory for unbounded operators in Hilbert space, compact operators, distributions. Applications.

**531-532 Algebra**

531, fall; 532, spring.

531: finite groups, field extensions, Galois theory, rings and algebras, tensor and exterior algebra. 532: Wedderburn structure theorem, Brauer group, group cohomology, Dedekind domains, primary decomposition, Hilbert basis theorem, local rings.

**537 Analytic Number Theory**

Fall. Prerequisites: Math 511, 521, 431.

Topics: The Prime Number Theorem. Primes in Arithmetic Progressions. The Large Sieve and Some of its Applications.

**549 Lie Groups and Differential Geometry**

Fall.

**550 Lie Groups and Lie Algebras**

Spring.

**551 Introductory Algebraic Topology**

Spring.

Fundamental group and covering spaces. Homology theories for complexes and spaces.

**552-553 Differentiable Manifolds**

552 fall, 553 spring. Prerequisites: advanced calculus, linear algebra (Mathematics 431), point set topology (Mathematics 453). This is a year-long introduction to differential topology and differential geometry at the level of the beginning graduate student.

Topological manifolds. Smooth manifolds, immersions and embeddings, tangent bundles, fiber bundles, vector fields and dynamical systems, Frobenius' theorem. Lie groups. Integration on manifolds, differential forms, Stokes theorem. Tubular neighborhoods, transversality and cobordism. Connections, Riemannian manifolds, geodesics, curvature, Gauss-Bonnet theorem.

**[561 Geometric Topology**

Topics from general topology. Introduction to geometric properties of manifolds. Not offered 1990-91.]

**571-572 Probability Theory**

571, fall; 572, spring. Prerequisite: a knowledge of Lebesgue integration theory, at least on the real line. Students can learn this material by taking parts of Mathematics 413-414 or 521. Properties and examples of probability spaces. Sample space, random variables, and distribution functions. Expectation and moments. Independence, Borel-Cantelli lemma, zero-one law. Convergence of random variables, probability measures, and characteristic functions. Law of large numbers. Selected limit theorems for sums of independent random variables. Markov chains, recurrent events. Ergodic and renewal theorems. Martingale theory. Brownian motion and processes with independent increments.

**571-574 Probability and Statistics**

571, fall; 574, spring. This course is a prerequisite to all advanced courses in statistics.

571: same as Mathematics 571 above. 574: topics include an introduction to the theory of point estimation, consistency, efficiency, sufficiency, and the method of maximum likelihood; the classical tests of hypotheses and their power; the theory of confidence intervals; the basic concepts of statistical decision theory; the fundamentals of sequential analysis. Intended to furnish a rigorous introduction to mathematical statistics.

**[573 Experimental Design, Multivariate Analysis**

Fall. Not offered 1990-91.

Rationale for selection of experimental designs and algorithms for constructing optimum designs. Optimum properties and distribution theory for classical analysis of variance procedures and their simplest multivariate analogues.]

**[575 Sequential Analysis, Multiple Decision Problems**

Fall. Prerequisite: a course in mathematical statistics such as Mathematics 574. Not offered 1990-91.]

**[577 Nonparametric Statistics**

Fall. Not offered 1990-91.

A study of nonparametric techniques, especially order statistics, rank order statistics, scores, local optimality properties, and perhaps some asymptotic theory.]

**581 Logic**

Spring.

Basic topics in mathematical logic, including propositional and predicate calculus; formal number theory and recursive functions; completeness and incompleteness theorems.

**611-612 Seminar in Analysis**

611, fall; 612, spring.

**[613 Functional Analysis**

Fall. Not offered 1990-91.

Topological vector spaces. Banach and Hilbert spaces, Banach algebras. Additional topics to be selected by instructor.]

**[615 Fourier Analysis**

Spring. Not offered 1990-91.]

**[622 Riemann Surfaces**

Fall. Not offered 1990-91.]

**[623 Several Complex Variables**

Not offered 1990-91.]

**[627-628 Seminar in Partial Differential Equations**

627, fall; 628, spring. Not offered 1990-91.]

**631-632 Seminar in Algebra**

631, fall; 632, spring.

**635 Topics in Algebra**

Fall.

Selection of advanced topics from algebra, algebraic number theory, and algebraic geometry. Course content varies.

**637 Algebraic Number Theory**

Fall.

**639 Topics in Algebra II**

Spring.

Selection of advanced topics from algebra, algebraic number theory, and algebraic geometry. Course content varies.

**640 Homological Algebra**

Spring.

**651-652 Seminar in Topology**

651, fall; 652, spring.

**653-654 Algebraic Topology**

653, fall; 654, spring.

Duality theory in manifolds, applications, cohomology operations, spectral sequences, homotopy theory, general cohomology theories, categories and functors.



**[655 Mathematical Foundations for Computer Modeling and Simulation (also Computer Science 655)]**

Spring. 4 credits. Prerequisites: Mathematics 431 and 432 or the equivalent, both in content and in the level of mathematical sophistication, or permission of instructors. Not offered 1990-91.

M W F 10:10.

This course will have two parts, one purely mathematical, the other applied. The former is intended to introduce students to theoretical tools that are relevant to the study of robotics, solid modeling, and simulation. These tools will be drawn from the areas of (real and complex) algebraic geometry, topology, differential geometry, and differential equations. The latter part of the course will provide applications that illustrate uses of the mathematics and point the way to needed further developments.]

**[657-658 Advanced Topology]**

657, fall; 658, spring.

Selection of advanced topics from modern algebraic, differential, and geometric topology. Course content varies.

**[661-[662] Seminar in Geometry]**

661, fall; [662, spring. Not offered 1990-91.]

**[667 Algebraic Geometry]**

Spring.

**[670 Topics in Statistics]**

Fall and spring.

A course taught occasionally to cover special topics in theoretical statistics not treated in other listed courses. Typical of the subjects that will be treated are time series analysis, and classification and cluster analysis.

**[671-672 Seminar in Probability and Statistics]**

**[674 Multivariate Analysis]**

Spring. Not offered 1990-91.]

**[675 Statistical Decision Theory]**

Spring. Not offered 1990-91.]

**[677-678 Stochastic Processes]**

677, fall; 678, spring.

**[681-682 Seminar in Logic]**

681, fall; 682, spring.

**[683 Model Theory]**

Fall.

**[684 Recursion Theory]**

Spring.

Theory of effectively computable functions. Classification of recursively enumerable sets. Degrees of recursive unsolvability. Applications to logic. Hierarchies. Recursive functions of ordinals and higher type objects. Generalized recursion theory.

**[685 Topics in Logic]**

Fall. Not offered 1990-91.

Topics in metamathematics. Course content varies.]

**[687 Set Theory]**

Spring. Not offered 1990-91.

Models of set theory. Theorems of Godel and Cohen, recent independence results.]

**[688 Automated Theorem Proving]**

Fall.

**[701-702 Oliver Club Seminar]**

**[703-704 Olivetti Club Seminar]**

**[711-712 Seminar in Analysis]**

**[727-728 Seminar in Numerical Analysis]**

**[731-732 Seminar in Algebra]**

**[733-734 Seminar in Computational Algebra]**

**[751-752 Topics in Geometry and Topology]**

**[776 Qualitative Theory of Dynamical Systems]**

Spring. 3 credits. Suggested prerequisite: T&AM 675, Mathematics 517, or equivalent. Offered alternate years.

Review of planar (single-degree-of-freedom) systems. Local and global analysis. Structural stability and bifurcations in planar systems. Center manifolds and normal forms. The averaging theorem and perturbation methods. Melnikov's method. Discrete dynamical systems, maps and difference equations, homoclinic and heteroclinic motions, the Smale Horseshoe and other complex invariant sets. Global bifurcations, strange attractors, and chaos in free and forced oscillator equations. Applications to problems in solid and fluid mechanics.

## MODERN LANGUAGES AND LINGUISTICS

J. Bowers, chair; W. Harbert, graduate faculty representative (214 Morrill Hall); A. Cohn, director of undergraduate studies (216 Morrill Hall); L. Babby, W. Browne, V. Carstens, G. Chierchia, N. Clements, G. Diffloth, J. Gair, J. Grimes, J. Huang, J. Jasanoff, J. Kingston, H. Kufner, F. Landman, R. Leed, S. McConnell-Ginet, J. Noblitt, A. Nussbaum, C. Rosen, C. Shih, D. Solà, M. Suñer, L. Waugh, J. Whitman, J. Wolff

The Department of Modern Languages and Linguistics offers courses in linguistics (the study of the general nature, structure, and history of language) and elementary, intermediate, and advanced courses in many of the languages of Europe, Africa, and south, southeast, and east Asia.

Most courses in modern languages and linguistics are offered by the Department of Modern Languages and Linguistics; see listings below under individual language names (e.g., Spanish) and under Linguistics. Courses in foreign language literatures and certain language courses as well are taught in the following departments; consult entries under the department name for course listings.

Africana Studies and Research Center: Ewe, Swahili

Asian Studies: Chinese, Japanese, Korean, Vietnamese

Classics: Greek, Latin, Sanskrit

German Studies: German

Near Eastern Studies: Akkadian, Arabic, Aramaic, Hebrew, Turkish

Romance Studies: French, Italian, Spanish

Russian Literature: Russian

The Full-year Asian Language Concentration (FALCON Program) offers intensive instruction in Chinese, Japanese, or Indonesian to students wishing to gain fluency in the language in a single year.

## Arabic

See listings under Near Eastern Studies.

## Bengali

**[121-122 Elementary Bengali]**

121, fall; 122, spring. 4 credits each term.

Prerequisite: for Bengali 122, Bengali 121 or examination.

Hours to be arranged. D. Sudan.

The emphasis is on basic grammar, speaking, and comprehension skills; Bengali script will also be introduced.

**[201-202 Intermediate Bengali]**

201, fall; 202, spring. 3 credits each term.

Prerequisites: for Bengali 201, Bengali 122 or examination; for Bengali 202, Bengali 201 or examination.

Hours to be arranged. D. Sudan.

Continuing instruction in grammar with attention to writing skills.

**[203-204 Continuing Bengali]**

203, fall; 204, spring. 3 credits each term.

Prerequisites: for Bengali 203, Bengali 122 or examination; for Bengali 204, Bengali 203 or examination.

Hours to be arranged. D. Sudan.

Continuing instruction in grammar with attention to speaking and reading skills.

**[303-304 Bengali Literature I, II]**

303, fall; 304, spring. 4 credits each term.

Prerequisites: Bengali 203-204 or equivalent.

Hours to be arranged. D. Sudan.

An introduction to noted Bengali writers.

Selections of works by Rabindranath Tagore and Abanindranath Tagore and short stories by Bohopul will be covered. The course will be devoted to reading these works and developing literary criticism and creative writing in Bengali.

## Burmese

**[101-102 Elementary Course]**

101, fall; 102, spring. 6 credits each term.

Prerequisite: for Burmese 102, Burmese 101 or equivalent.

Hours to be arranged. J. Wheatley.

A semi-intensive course for beginners or for those who have been placed in the course by examination. Gives a thorough grounding in all the language skills: listening, speaking, reading, and writing.

**[201-202 Intermediate Burmese Reading]**

201, fall; 202, spring. 3 credits each term.

Prerequisites: for Burmese 201, Burmese 102; for Burmese 202, Burmese 201.

Hours to be arranged. J. Wheatley.

**[203-204 Intermediate Composition and Conversation]**

203, fall; 204, spring. 3 credits each term.

Prerequisites: for Burmese 203, Burmese 102; for Burmese 204, Burmese 203.

Hours to be arranged. J. Wheatley.

**[301-302 Advanced Burmese Reading]**

301, fall; 302, spring. 4 credits each term.

Prerequisites: for Burmese 301, Burmese 202 or permission of instructor; for Burmese 302, Burmese 301.

Hours to be arranged. J. Wheatley.

Selected Burmese readings in various fields.

**401-402 Burmese Directed Individual Study**

Fall or spring. 4 credits each term. Prerequisite: permission of instructor.

Hours to be arranged. J. Wheatley.  
For students who wish to address special problems in the speech, grammar, or literature.

**Cambodian**

See Khmer.

**Cebuano (Bisayan)****101-102 Elementary Course**

101, fall; 102, spring. Offered according to demand. 6 credits each term. Prerequisite for Cebuano 102: Cebuano 101 or equivalent.

Hours to be arranged. J.U. Wolff.  
A semi-intensive course for beginners.

**Chinese**

For literature courses see Asian Studies.

**Fees.** Depending on the course, a small fee may be charged for photocopied texts for course work.

**101-102 Elementary Course**

101, fall; 102, spring. 6 credits each term. Prerequisite for Chinese 102: Chinese 101 or equivalent.

Lecs, M W F 9:05; drill, M-F 8 or 2:30.  
J. Wheatley, and staff.

A semi-intensive course for beginners or for those who have been placed in the course by examination. The course gives a thorough grounding in all the language skills: listening, speaking, reading, and writing. Students who speak some Mandarin but do not read should take 109/110. Students who read Chinese, speak Cantonese or other "dialects," and want to learn Mandarin should see the program director in Morrill Hall.

**109-110 Elementary reading (with Mandarin pronunciation)**

109, fall; 110, spring. 3 credits each term. Prerequisite: for Chinese 110, 109 or equivalent.

M W F 8. P. Wang.

This course is for the students who have spoken some Chinese in the home, but who do not read. If in doubt about eligibility, see instructor.

**111-112 Cantonese Elementary Speaking**

111, fall; 112, spring. 3 credits each term. Prerequisites: for Chinese 111, permission of instructor; for Chinese 112, Chinese 111. Both Chinese 112 and 114 or equivalents are necessary to fulfill any language requirements.

Lec T 12:20; drills, M W F 9:05 or 11:15.  
E. Leung.

Conversation in standard Cantonese as spoken in Hong Kong and Canton.

**113-114 Cantonese Elementary Readings**

113, fall; 114, spring. 3 credits each term. Prerequisites: for Chinese 113, permission of instructor; for Chinese 114, Chinese 113. Both Chinese 112 and 114 or equivalents are necessary to fulfill any language requirements.

Lec, R 12:20; drills, T R 9:05. E. Leung.  
Readings in modern expository prose with Cantonese pronunciation.

**201-202 Intermediate Chinese**

201, fall or summer; 202, spring or summer. 4 credits each term. Prerequisite: for Chinese 201, Chinese 102 or equivalent; for Chinese 202, Chinese 201.

M-F 9:05 or 11:15. Staff.

**211-212 Intermediate Cantonese**

211, fall; 212, spring. 4 credits each term. Prerequisites: for Chinese 211, Chinese 112 and 114 or equivalent; for Chinese 212, Chinese 211.

M W F 9:05. E. Leung.

**301-302 Advanced Chinese**

301, fall; 302, spring. 4 credits each term. Prerequisites: for Chinese 301, Chinese 202 or equivalent; for Chinese 302, Chinese 301.

M W F 11:15 or 12:20. Staff.

Readings and drills in modern expository Chinese.

**303-304 Advanced Chinese Conversation**

303, fall; 304, spring. 1 credit each term. Prerequisites: Chinese 201-202 or equivalent; or permission from instructor. S-U grades only.

T R 11:15. Staff.

Guided conversation and oral composition and translation. Corrective pronunciation drill.

**311-312 Advanced Cantonese**

311, fall; 312, spring. 4 credits each term. Prerequisites: for Chinese 311, Chinese 212 or equivalent; for Chinese 312, Chinese 311.

M W F 10:10. E. Leung.

**[401 History of the Chinese Language**

Fall or spring, according to demand. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

Hours to be arranged. Staff.

Survey of phonological and syntactic developments in Chinese.]

**[403 Linguistic Structure of Chinese I**

Fall. 4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1990-91.

Hours to be arranged. Staff.

Introductory course in the phonology of modern Mandarin Chinese.]

**[404 Linguistic Structure of Chinese II**

Spring, according to demand. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

Hours to be arranged. J. Huang.

Syntax of modern Mandarin Chinese.]

**[405 Chinese Dialects**

Fall or spring, according to student demand. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

Hours to be arranged. Staff.

Introductory survey of modern dialects and their distinguishing characteristics.]

**411-412 Readings in Modern Chinese (Mandarin pronunciation only)**

411, fall; 412, spring. 4 credits each term. Prerequisites: for Chinese 411, Chinese 302 or equivalent; for Chinese 412, Chinese 411.

M W F 1:25 or 2:30. Staff.

**413-414 Chinese Reading Tutorials**

413, fall; 414, spring. 2 credits each term. Prerequisites: Chinese 302; or equivalent and permission of instructor.

Hours to be arranged. Staff.

Individual or small-group guidance in advanced Chinese texts, designed primarily for Asian studies majors taking other courses with reading assignments in Chinese.

**415-416 Expository Writing in Modern Chinese**

415, fall; 416, spring. 3 credits. Prerequisites: Chinese 411-412 or equivalent.

Hours to be arranged. Staff.

Designed for students with advanced speaking and reading ability in Mandarin Chinese who require further practice in writing.

**[607 Chinese Dialect Seminar**

Fall or spring, on student demand. 4 credits. Prerequisites: Chinese 405 and permission of instructor. Not offered 1990-91.

Hours to be arranged. Staff.

Analysis and field techniques in a selected dialect area.]

**FALCON**

J. Wheatley, 416 Morrill Hall (255-9301).

**161-162 Intensive Mandarin Course**

161, fall; 162, spring. 16 credits each term. Prerequisites: for Chinese 161, Chinese 160 (Cornell summer intensive course) or permission of instructor; for Chinese 162, Chinese 161.

M-F 6 hours each day. J. Wheatley and staff.

Foreign language requirement: Proficiency is attained by passing 161.

**Danish****131-132 Elementary Course**

131, fall; 132, spring. 3 credits each term. Prerequisite for Danish 132, Danish 131 or equivalent. This language series cannot be used to satisfy the language requirement.

M W F 8. P.M. Mitchell.

**Dutch****121-122 Elementary Course**

121, fall or summer; 122, spring or summer. 4 credits each term. Prerequisite: permission of instructor.

M T W F 1:25. M. Briggs.

Intensive practice in listening, speaking, reading, and writing basic Dutch in meaningful contexts. The lecture offers insight into Dutch language, culture, and society.

**123 Continuing Course**

Fall. 4 credits each term. Prerequisites: Dutch 122 or equivalent.

M T W F 11:15. M. Briggs.

Improves speaking skills, such as fluency and pronoun creation, focusing on verbal communication skills; offering a wide range of readings and sharpening listening skills based on Dutch and Dutch-speaking cultures.

**203 Intermediate Composition and Conversation**

Spring. 3 credits. Prerequisite: Qualification in Dutch or permission of instructor.

M W F 11:15. M. Briggs.

Improved control of Dutch grammatical structures and vocabulary through guided conversation, compositions and reading, drawing on Dutch and other Dutch-speaking cultures.

**English**

Intensive English Program, see p. 310.

**205 English as a Second Language**

Fall. 4 credits. Prerequisite: placement by examination.

M T W R 10:10 or 3:35. M. Martin.  
Advanced spoken and written English, with emphasis on speaking, understanding, and reading.

**206 English as a Second Language**

Spring. 3 credits. Prerequisite: English 205 or placement by examination.

M W F 10:10. M. Martin.  
Designed for those who have completed English 205 and who require or desire further practice. Emphasis is on developing control of written as well as spoken language.

**209 English as a Second Language**

Fall or spring. 1 credit. Prerequisite: placement by examination.

Hours to be arranged. M. Martin.  
Practice in informal conversational English pronunciation, techniques for gaining information, informal conversation, and classroom speaking. Students also practice giving informal presentations. Personal conferences with the instructor supplement class work.

**210 English as a Second Language**

Spring. 1 credit. Prerequisite: placement by examination.

Hours to be arranged. M. Martin.  
Practice in academic speaking. Formal classroom discussion techniques and presentation of information in various forms. Personal conferences supplement class work.

**211-212 English as a Second Language**

211, fall, spring, or summer; 212, spring. 3 credits each term. Prerequisite: placement by examination.

211: M W F 9:05, 10:10, 11:15, or 2:30.  
T R 10:10-11:25 or 2:55-4:10. 212: M W F 9:05 or 11:15; T R 2:55-4:10. M W 4:45-6 for students in the social sciences and humanities; T R 4:45-6 for students in science and technology. D. Campbell.  
Advanced writing, with emphasis on improving vocabulary, grammar, and control of college-level written English.

**213 Written English for Non-Native Speakers**

Spring. 3 credits. Prerequisite: placement by examination.

T R 10:10, plus a weekly conference. M. Martin.  
Designed for those whose writing fluency is sufficient for them to carry on regular academic work but who feel the desire for refining and developing their ability to express themselves clearly and effectively. As much as possible, students receive individual attention.

**Freshman Writing Seminar****215-216 English for Later Bilinguals**

215, fall or summer; 216, spring. 3 credits each term. Not designed for students whose schooling has been mostly in English. Prerequisite for English 216: English 215.

M W F 2:30. M. Martin.  
A course designed to strengthen the English-language skills of students from other countries who have studied for one to five years in American high schools and whose language in the home is not English. Intensive work in written English is offered, with emphasis on sentence structure, cohesion, vocabulary expansion, grammatical structure, and maturity of style. Individual conferences on papers supplement class work. The focus of English 216 is the process of producing a full-length library research paper.

**Ewe**

See listings under Africana Studies and Research Center.

**French**

A. Cohn, J.S. Noblitt, L.R. Waugh (director of undergraduate studies, 315 Morrill Hall, 255-0717).

For literature courses see Romance Studies.

**The Major**

The major in French linguistics is designed to give students proficiency in the oral and written language, and to develop skills in the linguistic analysis of French. (For the major in French literature see the description under Romance Studies).

While prospective majors should try to plan their programs as far ahead as possible, no student will be refused admission merely because of a late start. It is even possible for a student to begin French and/or Linguistics at Cornell and become a major. Students wishing to major in French linguistics should consult the director of undergraduate studies of the Department of Modern Languages and Linguistics, Professor Linda Waugh, who will admit them to the major.

**The Core**

- 1) All majors are expected to acquire a sound degree of competence in language. This competence is demonstrated by the successful completion of French 312 or by the passing of a special examination to be taken no later than the end of the junior year. A typical program will involve two semesters of language at the 200 level (to be taken no later than the end of the sophomore year) and two semesters of language at the 300 level (French 311-312). Students may bypass any part of the sequence through placement examinations.
- 2) All majors are expected to take either French 201 or 202, at least one of which should be completed successfully no later than the end of the sophomore year.
- 3) All majors must have successfully completed Linguistics 101-102, or Linguistic 101-Linguistic 400, or the equivalent.

**The Linguistic Option**

- 1) The successful completion of six courses in French, Romance, and general linguistics (in addition to Linguistics 101-102), of which at least 3 will be in French and Romance Linguistics. These courses will include at least one course concerning the history of French (e.g., French 401, Romance Linguistics 321) and one course concerning the structure of French (e.g., French 408, 410, or 602).
- 2) The successful completion of two courses (preferably a sequence) in some allied area, for example, (a) French literature and civilization, (b) psycholinguistics, (c) philosophy of language, (d) French history, culture, music, or history of art or architecture.

**Study Abroad in France**

French majors or other interested students may study in France for one or two semesters during their junior year. Opting for one of several study-abroad plans recognized by the departments of Romance Studies and Modern Languages and Linguistics facilitates the transfer of credit. Information about these plans is available from Jacques Béraud, director of undergraduate studies, Department of Romance Studies. (See the description of the program in Paris sponsored by Cornell under the Department of Romance Studies.)

**Honors.** The honors program encourages well-qualified students majoring in French linguistics to do independent work in French outside the structure of courses. The preparation of the senior honors essay, generally spread over two terms, provides a unique learning opportunity, since it allows for wide reading, and extensive rewriting to a degree not practically possible in the case of course papers.

No special seminars or courses are required of honors students, but they will have regular meetings with the faculty advisers who have agreed to supervise their work. They may receive course credit by enrolling in French 429-430, but these independent study courses must be taken in addition to the courses that meet the minimum requirements for the major. At the end of the senior year each honors student is examined orally on the honors essay by a jury consisting of his or her faculty adviser and two other faculty members. The awarding of honors is determined by the student's grades in the major and the quality of the honors essay.

**Fees.** Depending on the course, a small fee may be charged for copies of texts for course work.

**101 Basic Course I**

Summer only. 6 credits.

M-F 8-12. Staff.  
An introductory course offering opportunities for student interaction and intensive practice in listening to, speaking, reading, and writing basic French in meaningful contexts. Students who have previously studied French must take the qualifying examination before registering for this course.

**121 Beginning French**

Fall only. 4 credits. No prerequisites.

Intended for beginning students or those placed by examination.

Lec, R 9:05, 10:10 or 11:15; Sec, M T W F 8, 9:05, 10:10, 11:15, 12:20, 1:25 or 2:30. N. Gabriel.

The four recitation sections per week offer the opportunity for student interaction and intensive practice in listening to, speaking, reading, and writing basic French in meaningful contexts. Lectures offer insights into French language, culture, and society.

**122 Elementary French**

Fall or spring. 4 credits. Prerequisite: French 121 or CPT score between 370 and 440.

Students who obtain a CPT score of 560 after French 122 attain qualification and may enter the 200-level sequence; otherwise, French 123 is required for qualification.

Fall: Lec, R 1:25; Sec, M T W F 9:05, 10:10, 12:20, 1:25 or 2:30. M. J. Ellis. Spring: Lec, R 9:05, 10:10 or 11:15; Sec, M T W F 8, 9:05, 10:10, 11:15, 12:20, 1:25 and 2:30. N. Gabriel.

The goal of French 122 is to build on the students' elementary knowledge of French so that they can function in basic situations in a French-speaking culture. Sections continue to provide intensive, context-specific practice in speaking, listening, reading, and writing. Lectures address cultural and linguistic issues.

**123 Continuing French**

Fall, spring, or summer. 4 credits. Fall enrollment strictly limited. Limited to students who have previously studied French and have a CPT score between 450 and 559. Satisfactory completion of French 123 fulfills the qualification portion of the language requirement.

Lec, T 10:10 or 12:20; Sec, M W R F 9:05, 10:10, 11:15, 12:20, 1:25, or 2:30. A. Levy.

French 123 is an all-skills course designed to improve pronunciation, oral communication, and reading ability; to establish a groundwork for correct writing; and to provide a substantial grammar review. Both lectures and sections encourage the student to see a foreign language as something beyond a batch of skills to be memorized. The course features authentic texts, a functional grammar, and exchange students from France who visit the sections.

*Note: Students placed in 200-level courses have the option of taking language and literature courses. See listings under Romance Studies for descriptions of the literature courses, any of which may be taken concurrently with the 203-204 language courses described below.*

**203 Intermediate Composition and Conversation**

Fall, spring, or summer. 3 credits. Prerequisite: qualification in French (French 123 or CPT score 560-649).

Lec, T 11:15 or 1:25 or R 10:10; drills, M W F 9:05, 10:10, 11:15, 12:20, 1:25, 2:30, or 3:35. I. Daly.

Improved control of French grammatical structure and vocabulary through guided conversation, composition, and reading. Lectures include grammar review, listening comprehension exercises, and videos on current topics. Taught in French.

**204 Intermediate Composition and Conversation**

Fall, spring, or summer. 3 credits. Enrollment limited. Prerequisite: French 203, permission of instructor, or placement by Cornell Advanced Standing Examination (CASE) offered by the Department of Modern Languages and Linguistics. This course, or its equivalent, is required for admission to the Cornell Abroad program.

Fall: lec, T 10:10 or 2:30; drills, M W F 10:10, 11:15, 12:20, 1:25 or 2:30. Spring: lec, T 10:10 or 2:30; drills, M W F 9:05, 10:10, 11:15, 12:20, or 1:25. C. Waldron.

Emphasis on improving oral and written expression of accurate, idiomatic French. Includes enrichment of vocabulary, readings in contemporary prose, treatment of specific problems in grammar, guest speakers, and presentations of videos and films. Taught in French.

**401 History of the French Language**

Fall. 4 credits. Prerequisites: qualification in French and Linguistics 101, or permission of instructor. Offered alternate years.

M W F 2:30. A. Colby-Hall.

Diachronic development of French from Latin, with emphasis on phonological and morphological change. Course work includes problems in reconstruction, textual analyses, discussions of theoretical topics, and external history.

**[407 Applied Linguistics: French**

Fall. 4 credits. Prerequisite: qualification in French. Offered alternate years.

M W F 10:10. J. S. Noblitt.

Designed to equip the student with the ability to apply linguistic descriptions in teaching French, with special emphasis on phonetics and morphology.]

**[408 Linguistic Structure of French I (also Linguistics 408)**

Fall. 4 credits. Prerequisites: qualification in French and Linguistics 101 or Linguistics 400, or permission of instructor.

Hours to be arranged. A. Cohn.

A synchronic study and analysis of modern French, with emphasis on its phonology, morphology, and syntax.]

**410 Linguistic Structure of French II**

Fall. 4 credits. Prerequisite: permission of instructor. Offered alternate years.

Hours to be arranged. L. Waugh.

A synchronic study and analysis of modern French, with emphasis on semantics, pragmatics, and discourse analysis.

**[602 Linguistic Structure of Old and Middle French**

Spring. 4 credits. Prerequisite: French 408 or permission of instructor. Offered alternate years.

Hours to be arranged. J. S. Noblitt.

Through study of Old and Middle French texts, student analyze synchronically aspects of the grammar of the language at different periods.]

**[604 Contemporary Theories of French Grammar**

Spring. 4 credits. Prerequisite: permission of instructor.

Hours to be arranged. L. Waugh.

Selected readings of twentieth-century French linguistics.]

**630 French for Reading—Graduate Students**

Spring. 3 credits. Limited to graduate students.

Hours to be arranged. Staff.

The primary aim of this course is to develop skill in reading French. (Those interested in an all-skills approach should consider French 121-122.) Some flexibility in selecting texts according to field of interest is offered. One hour per week is devoted to vocabulary building and preparation for standardized tests.

**700 Seminar in French Linguistics**

Fall or spring, according to demand. Credit to be arranged.

Hours to be arranged. Staff.

Seminars are offered according to faculty interest and student demand. Topics in recent years have included current theories in French phonology, current theories in French syntax, and semantics of French. Topic for spring 1991: Acoustics of French (A. Cohn).

**German**

W. Harbert, J.H. Jasanoff, H.L. Kufner (director of undergraduate studies, 211 Morrill Hall, 255-0723).

For literature courses see German Studies.

**The German Major**

See German Studies.

**Study Abroad**

Cornell has a formal agreement with the University of Hamburg enabling its undergraduates to take courses in any field offered by the German university. The program offers a challenging course of study and the experience of total immersion in German life and culture. Participants in this program attend a required 3-credit orientation course in September, which is designed to help them adjust to the academic and social life of Germany. Special field trips are organized as part of the orientation session. Beginning in mid-October, students enroll as fully matriculated students at the University of Hamburg.

Cornell maintains a center in Hamburg with appropriate support staff. The resident director is a faculty member from Cornell, who teaches a special seminar each semester, provides academic advice, and helps ensure the quality of the courses. The center, which includes a classroom, a small library, and word-processing facilities, is used by students for the orientation session, special seminars, tutorials, lectures, and informal gatherings.

Applicants are expected to have attained at least proficiency in German prior to departure. Students are strongly encouraged to study abroad for the entire year rather than for one semester. For further information, students should contact H.L. Kufner, Director of undergraduate studies, Department of Modern Languages and Linguistics, and the Cornell Abroad Office (474 Uris Hall, 255-6224).

**German Area Studies Major**

See German Studies.

Honors. The honors program in German is open to superior students who want to work independently in an area of their own choice. Students are free to select any faculty member of the Field of Germanic Studies (in the case of area studies majors, the appropriate member of their committee) to assist them in designing their honors program, to supervise their work, and to help them select a suitable topic for an



honors essay. The independent study courses, German 451 and 452, may form part of the program.

### Freshman Writing Seminar Requirement

See German Studies.

**Fees.** Depending on the course, a small fee may be charged for photocopied texts for course work.

### 121-122 Elementary Course

121, fall or summer; 122, spring or summer. 4 credits each term. Prerequisite for German 122: German 121 or equivalent. Intended for beginners or students placed by examination. Students who obtain a CPT score of 560 after German 121-122 attain qualification and may enter the 200-level sequence; otherwise German 123 is required for qualification.

Lec, T 9:05, 11:15, or 1:25; drills, M W R F 8, 9:05, 10:10, 11:15, 12:20 or 1:25. H. L. Kufner.

A thorough grounding in all the language skills is given: listening, speaking, reading, and writing. Language practice is in small groups. Lectures cover grammar, reading, and cultural information.

### 123 Continuing German

Fall, spring, or summer. 4 credits. Limited to students who have previously studied German and have a CPT achievement score between 450 and 559. Satisfactory completion of German 123 fulfills the qualification portion of the language requirement.

Fall: Lec, M 12:20; drills, T-F 9:05, 10:10, 11:15, or 12:20. Spring: Lec, M 12:20; drills, T-F 10:10 or 12:20 H. L. Kufner.

An all-skills course designed to prepare students for study at the 200 level.

### 203 Intermediate Composition and Conversation

Fall or spring. 3 credits. Prerequisite: qualification in German (German 123 or CPT score of 560-649).

Fall: M W F 9:05, 10:10, 11:15, or 1:25.

Spring: M W F 9:05, 10:10, or 1:25. Staff.

Guided conversation, composition, reading, and grammar review emphasizing the development of accurate and idiomatic expression.

### 204 Intermediate Composition and Conversation

Fall or spring. 3 credits. Prerequisite: German 203 or permission of instructor.

Fall: M W F 11:15. Spring: M W F 10:10, 11:15, or 1:25. Staff.

### 303-304 Advanced Composition and Conversation

303, fall; 304, spring. 4 credits each term. Prerequisite for German 303: German 204 or equivalent. Prerequisite for German 304: German 303 or equivalent.

Fall: M W F 10:10 or 11:15; Spring: M W F 11:15. G. Valk.

Emphasis is on increasing the student's oral and written command of German. Detailed study of present-day syntax and different levels of style.

### 306 Zeitungsdeutsch

Fall. 4 credits. Prerequisite: German 304 or equivalent.

M W F 9:05. G. Valk.

**401 Introduction to Germanic Linguistics**  
Fall. 4 credits. Prerequisite: Linguistics 101 or permission of instructor.

Hours to be arranged. W.E. Harbert.

Survey of major issues in historical Germanic linguistics.

### [402 History of the German Language

Spring. 4 credits. Prerequisites: German 204 and Linguistics 101 or permission of instructor. Offered alternate years. Not offered 1990-91.

Hours to be arranged. Staff.

Phonological, morphological, syntactic, and semantic developments from pre-Old High German times to the present.]

### [403 Modern German Phonology

Fall. 4 credits. Prerequisites: German 304 or equivalent, and Linguistics 101 or 301. Not offered 1990-91.

Hours to be arranged. Staff.

The phonological system of German is viewed from various theoretical approaches.]

### [404 Modern German Syntax

Spring. 4 credits. Prerequisite: German 304 or equivalent, and Linguistics 101 or 303. Not offered 1990-91.

Hours to be arranged. W.E. Harbert.

An application of selected theoretical syntactic models to problems in the syntax of modern German.]

### 406 Runology

Spring. 4 credits. Prerequisite: German 401.

Hours to be arranged. W. Harbert.

A study of the inscriptions in the older futhork and their relevance to historical Germanic linguistics.

### 407 Applied Linguistics: German

Fall. 4 credits.

M W F 10:10. H.L. Kufner.

Designed to equip the teacher of German with the ability to apply current linguistic theory to the second-language learning situation.

### [602 Gothic

Spring. 4 credits. Prerequisite: Linguistics 101. Offered alternate years.

Hours to be arranged. W.E. Harbert.

Linguistic structure of Gothic, with extensive readings of Gothic texts.]

### 603 Old High German, Old Saxon

Fall. 4 credits. Prerequisite: Linguistics 101. Offered alternate years.

Hours to be arranged. W. Harbert.

### [605 Structure of Old English

Fall. 4 credits. Prerequisite: German 401. Not offered 1990-91.

Hours to be arranged. W.E. Harbert.

Linguistic overview of Old English, with emphasis on phonology and syntax.]

### [606 Topics in Historical Germanic Phonology

Fall. 4 credits. Prerequisite: German 401. Not offered 1990-91.

Hours to be arranged. Staff.

The development of the sound system from Proto-Germanic to its daughter languages.]

### [607 Topics in Historical Germanic Morphology

Fall. 4 credits. Prerequisite: German 401. Not offered 1990-91.

Hours to be arranged. J. Jasanoff.

The Germanic verbal system and its Indo-European origins.]

### 608 Topics in Historical Germanic Syntax

Fall. 4 credits. Prerequisite: German 401.

Hours to be arranged. W.E. Harbert.

A diachronic and comparative investigation of syntactic processes in the older Germanic languages.

### 609-610 Old Norse

609, fall or summer; 610, spring or summer. 4 credits each term.

Hours to be arranged. Staff.

Study of the linguistic structure of Old Norse, with extensive reading of Old Norse texts.

### [611 Readings in Old High German and Old Saxon

Spring. 4 credits.

Hours to be arranged. J. Jasanoff.

Texts are chosen to suit the interests of the students taking the course but normally include selections from the more extensive Old High German and Old Saxon sources (Otfrid, Tatian, Heliand) as well as representative shorter works such as Hildebrandslied, Muspilli, and Genesis.]

### 631-632 Elementary Reading I

631, fall or summer; 632, spring or summer.

3 credits each term. Limited to graduate students. Prerequisite for German 632:

German 631 or equivalent.

M W F 9:05 or 12:20. D. McGraw.

Emphasis is on developing skill in reading, although some attention will be devoted to the spoken language, especially to listening comprehension.

### [710 Seminar in Germanic Linguistics

Fall or spring, subject to the needs of students and to the limitations of staff time. 4 credits. Not offered 1990-91.

Hours to be arranged. Staff.]

### [720 Seminar in Comparative Germanic Linguistics

Fall or spring, subject to the needs of students and to the limitations of staff time. 4 credits. Not offered 1990-91.

Hours to be arranged. Fall: staff; spring: W.E. Harbert.

Topics include phonology, morphology, syntax, and dialectology of the older Germanic languages.]

### [730 Seminar in German Linguistics

Fall or spring, subject to the needs of students and the limitations of staff time. 4 credits. Not offered 1990-91.

Hours to be arranged. Staff.

Selected topics including the history, structure, and dialects of German.]

## Modern Greek

See listings under Classics.

## Modern Hebrew

See listings under Near Eastern Studies.

## Hindi-Urdu

### 101-102 Hindi-Urdu Elementary Course

101, fall; 102, spring. 6 credits each term.

Prerequisite for Hindi 102: Hindi 101 or equivalent.

Lecs, M W 2:30; drills, M-F 10:10. Staff.

A semi-intensive course for beginners. A thorough grounding in all the language skills is given: listening, speaking, reading, and writing.

**201-202 Intermediate Hindi Reading**

201, fall; 202, spring. 3 credits each term.  
Prerequisites: for Hindi 201, Hindi 102; for Hindi 202, Hindi 201 or permission of instructor.

M W F 9:05. Staff.

**203-204 Intermediate Composition and Conversation**

203, fall; 204, spring. 3 credits each term.  
Prerequisites: for Hindi 203, Hindi 102; for Hindi 204, Hindi 203 or permission of instructor.

Hours to be arranged. Staff.

**[301-302 Advanced Readings in Hindi Literature**

301, fall; 302, spring. 4 credits each term.  
Prerequisites: for Hindi 301, Hindi 202; for Hindi 302, Hindi 301 or equivalent. Not offered 1990-91.

Hours to be arranged. Staff.]

**303-304 Advanced Composition and Conversation**

303, fall; 304, spring. 4 credits each term.  
Prerequisites: for Hindi 303, Hindi 204 or equivalent; for Hindi 304, Hindi 203 or equivalent.

Hours to be arranged. Staff.

**[305-306 Advanced Hindi Readings**

305, fall; 306, spring. 4 credits each term.  
Prerequisites: for Hindi 305, Hindi 202 or equivalent; for Hindi 306, Hindi 305 or equivalent. Not offered 1990-91.

Hours to be arranged. Staff.

Intended for those who wish to do readings in history, government, economics, etc., instead of literature.]

*Note: For complete descriptions of courses numbered 600 and above, consult the appropriate instructor.*

**[700 Seminar in Hindi Linguistics**

Fall or spring. 3 credits. Prerequisite: permission of instructor. Not offered 1990-91.

Hours to be arranged. Staff.]

**Hungarian****[131-132 Elementary Course**

131, fall; 132, spring. 3 credits each term. This language series cannot be used to satisfy the language requirement. Offered alternate years. Not offered 1990-91.

M W F 9:05. Staff.

Intended for beginners or students with limited knowledge of the language.]

**Indonesian**

For students who have completed Indonesian 101-102 or its equivalent there is the option of a one-semester program in Malang, East Java, during the junior year. The program combines a variety of cultural and artistic options with area course work and advanced language study. Complete information is available through Cornell Abroad.

Students who have completed a minimum of 18 credits or the equivalent are eligible to apply for a summer program in the Advanced Indonesian Abroad Program. Further information is available from Professor J. U. Wolff.

**101-102 Elementary Course**

101, fall; 102, spring. 6 credits each term.  
Prerequisites: for Indonesian 102: Indonesian 101.

M-F 9:05, plus 2 hours to be arranged.  
J. U. Wolff.

A semi-intensive course for beginners.

**201-202 Intermediate Indonesian Reading**

201, fall; 202, spring. 3 credits each term.  
Prerequisites: for Indonesian 201, Indonesian 102; for Indonesian 202, Indonesian 201 or permission of instructor.

Hours to be arranged. J. U. Wolff.

**203-204 Intermediate Composition and Conversation**

203, fall; 204, spring. 3 credits each term.  
Prerequisites: for Indonesian 203, Indonesian 102; for Indonesian 204, Indonesian 203 or permission of instructor.

Hours to be arranged. J. U. Wolff.

**300 Linguistic Structure of Indonesian**

Fall or spring. 4 credits. Prerequisites: Indonesian 101-102 or equivalent, and Linguistics 101.

Hours to be arranged. J. U. Wolff.

**301-302 Advanced Readings in Indonesian and Malay**

301, fall; 302, spring. 4 credits each term.  
Prerequisites: for Indonesian 301, Indonesian 201-202 or equivalent; for Indonesian 302, Indonesian 301.

Hours to be arranged. J. U. Wolff.

**303-304 Advanced Indonesian Conversation and Composition**

303, fall; 304, spring. 4 credits each term.  
Prerequisites: for Indonesian 303, Indonesian 204; for Indonesian 304, Indonesian 303 or equivalent.

Hours to be arranged. J. U. Wolff.

**305-306 Directed Individual Study**

305, fall; 306, spring. 2-4 credits. Prerequisite: Indonesian 301-302 and 303-304 or equivalent knowledge of Indonesian or Malay.

Hours to be arranged. J. U. Wolff.

A practical language course on an advanced level in which the students will read materials in their own field of interest, write reports, and meet with the instructor for two hours a week for two credits and twice a week for four credits.

**401-402 Advanced Readings in Indonesian and Malay Literature**

401, fall; 402, spring. 4 credits each term.  
Prerequisites: for Indonesian 401, Indonesian 302 or equivalent; for Indonesian 402, Indonesian 401 or equivalent.

Hours to be arranged. J. U. Wolff.

**FALCON****161-162 Intensive Course**

161, fall; 162, spring. 16 credits each term.  
Prerequisite: permission of instructor.

M-F 6 hours each day. J. U. Wolff and staff.

**Related Course**

Seminar in Austronesian Linguistics (Linguistics 655-656).

**Italian**

G. Chierchia, C. Rosen.

For literature courses see Romance Studies.

**The Italian Major**

See Romance Studies.

**Study Abroad**

Italian majors may study in Italy, generally during their junior year, under any of those study-abroad plans organized by American universities that allow the transfer of grades and credit, such as the Cornell program in Rome.

The College of Architecture, Art, and Planning maintains a program open to all qualified students attending Cornell. The program is housed in the sixteenth-century Palazzo Massimo, designed by the architect Baldassare Peruzzi, on the Corso Vittorio Emanuele, in the heart of Rome. Students may enroll for a semester in the fall or spring. Courses regularly taught at the Palazzo Massimo include: Architecture 300, 401, 402, 500, 502, Design Studio; Architecture 338 and 399, Special Topics in Architectural History; Architecture 458, Special Projects in Design Communications; Architecture 367, Contemporary Italian Culture; Architecture 510, Thesis Introduction; Art 251, 311, 322, and 371; and History of Art 371, Renaissance and Baroque Art in Rome; Italian 111, 112, elementary Italian 111 and 112 correspond to Cornell courses 121 and 122 respectively (see below). Students having passed 111 in Rome will be admitted to 122 when they get back to Cornell. Students having passed 112 in Rome will be granted credit but must take the CPT (after Fall 1990: the Italian Skills Assessment) for satisfaction of the language requirement and for placement into more advanced courses upon their return to Cornell.

To be eligible, students must have completed the first two years of their curriculum requirements and be in good academic standing.

**Fees.** Depending on the course, a small fee may be charged for copies of texts for course work.

**101 Basic Course I**

Summer only. 6 credits.

M-F 8-12. Staff.

A thorough grounding in all basic language skills. Students who have previously studied Italian must take the qualifying examination before registering for this course.

**121-122 Elementary Italian**

121, fall; 122, spring. 4 credits each term.  
Prerequisite for Italian 122: Italian 121 or equivalent. Intended for beginners or students placed by examination. At the end of Italian 122, students who score 560 or higher on the CPT (after Fall 1990: the Italian Skills Assessment) attain qualification and may enter the 200-level sequence; otherwise Italian 123 is required for qualification.

Lec, T 10:10, 12:20, or 2:30; drills, M W R F 8, 9:05, 10:10, 11:15, 12:20, 1:25, 2:30, 3:35 or 4:40. I. Chierchia.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing. Language practice is in small groups. Lectures cover grammar and cultural information.

**123 Continuing Italian**

Fall and summer. 4 credits. Limited to students who have previously studied Italian and score between 450 and 559 on the CPT (after Fall 1990: the Italian Skills Assessment). Satisfactory completion of Italian 123 fulfills the qualification portion of the language requirement.

M-F 9:05, 10:10, or 11:15. J. Scarpella.

**203-204 Intermediate Composition and Conversation**

203, fall or spring; 204, spring. 3 credits each term. Prerequisites: for Italian 203, qualification in Italian, for Italian 204, 203 or equivalent.

203, fall: M W F 10:10, 12:20, 1:25 or 2:30. M. Swenson. 203, spring: M W F 1:25. J. Scarpella. 204, spring: M W F 12:20, 1:25 or 2:30. I. Chierchia.

Guided conversation, composition, reading, pronunciation, and grammar review emphasizing the development of accurate and idiomatic expression in the language.

*Note: Students placed in 200-level courses also have the option of taking courses in introductory literature; see separate listing under Italian 201 for description of this course, which may be taken concurrently with the Italian 203-204 language courses described above. The introductory literature courses are offered by the respective literature departments, and the 203-204 language courses by the Department of Modern Languages and Linguistics.*

**300 Advanced Italian: Language in Italian Culture**

Spring. 3 credits. Prerequisite: Italian 204 or equivalent or permission of instructor.

M W F 11:15. I. Chierchia.

Further development of all skills, with emphasis on self-expression. Readings center on two themes: (1) contemporary Italian life and (2) the Italian language, its origins, development, and present state, including the role of the dialects. Emphasis on vocabulary building and awareness of stylistic levels.

**[403 Linguistic Structure of Italian**

Spring. 4 credits. Prerequisites: Linguistics 101 or equivalent, and qualification in any Romance language. Offered alternate years. Not offered 1990-91.

Hours to be arranged. G. Chierchia, C. Rosen.

Survey of Italian grammar in the light of current linguistic theories. Central topics in syntax (auxiliaries, modals, clitics, agreement, impersonal constructions, causatives) and in phonology (syllable format, stress, raddoppiamento phenomena).]

**[631 Readings in Italian Opera Libretti**

Spring. 2 credits. For graduate students only. Prerequisite: permission of instructor. Offered alternate years. Not offered 1990-91.

Hours to be arranged. C. Rosen.

Several libretti are read with the aim of understanding the syntax, literal meaning, and immediate metaphorical meanings. Some discussion of metrics. Intended primarily for grads concurrently enrolled in a music seminar, with which the readings are correlated.]

**Japanese**

For literature courses see Asian Studies.

**101-102 Elementary Course**

101, fall; 102, spring. 6 credits each term.

Prerequisite for Japanese 102: Japanese 101 or placement by the instructor during registration. Intended for beginners or for those who have been placed in the course by examination.

Lecs, M W F 10:10 or 12:20; Drills, M-F 8, 9:05, 10:10, 11:15, 12:20, 1:25, 2:30, or 3:35. Staff.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

**123 Accelerated Introductory Japanese**

Fall. 6 credits. Prerequisite: placement by the instructor at beginning of semester.

Lecs, M W F 12:20 (with Japanese 101); drills, M W F 1:25. Staff.

Accelerated training in listening, speaking, reading, and writing for students who have already acquired a limited facility in Japanese through residence in Japan or brief formal study but who require additional training to qualify for admission to Japanese 102.

**201-202 Intermediate Japanese Reading I**

201, fall; 202, spring. 2 or 3 credits each term.

Students having had Japanese 203 and 204 register for 2 credits and attend the W drill and the F lecture; other students register for 3 credits (with permission of instructor) and attend the W drill and the M, W, F lectures.

Prerequisites: for Japanese 201, Japanese 102 or placement by the instructor during registration; for Japanese 202, Japanese 201 and 204 or placement by the instructor during registration.

Lecs, M W F 1:25; drill, W 10:10, 2:30, or 3:35. Staff.

Reading of elementary texts with emphasis on expository style.

**203-204 Intermediate Japanese Conversation**

203, fall and summer; 204, spring and summer. 4 credits each term. Prerequisites: for Japanese 203, Japanese 102 or placement by the instructor during registration; for Japanese 204, Japanese 203, 205, or 223, or placement by the instructor during registration.

Lecs, M W 1:25; drills, M T R F 10:10, 11:15, 12:20, 2:30, or 3:35. Staff.

Training in listening and speaking for students who have acquired basic oral proficiency. Students are strongly encouraged to enroll in Japanese 201-202 concurrently.

**[223 Transition to Intermediate Japanese Conversation**

Fall. 6 credits. Prerequisite: Japanese 160 (Cornell intensive summer course) or placement by the instructor during registration. Not offered 1990-91.

Lecs, T R 1:25 plus one hour to be arranged; drills, M-F 12:20. Staff.

Provides transition, primarily for summer course students, into regular program. After Japanese 223 the students will have covered the same material that 203 students have covered. Japanese 223 satisfies prerequisite for 204. Recommended also for students with insufficient background to qualify for Japanese 203, determined by examination during registration period.]

**301-302 Intermediate Japanese Reading II**

301, fall; 302, spring. 4 credits each term.

Prerequisites: for Japanese 301, Japanese 202 or placement by the instructor during registration; for Japanese 302, Japanese 301 or placement by the instructor during registration.

M W F 11:15 or 2:30. K. Smith or K. Selden.

Reading of selected modern texts with emphasis on expository style.

**303-304 Communicative Competence**

303, fall; 304, spring. 3 credits each term.

Prerequisite for Japanese 303, Japanese 204 or placement by the instructor during registration; for Japanese 304, Japanese 303 or placement by the instructor during registration.

M W F 1:25 or 3:35; lec to be arranged. Staff.

Drill in the use of spoken Japanese within the constraints set by Japanese social settings.

**341-342 Advanced Japanese for Business Purposes**

341, fall; 342, spring. 4 credits each term.

Prerequisite: permission of instructor.

Hours to be arranged. Staff.

This course sequence will offer advanced training in Japanese with concentration on topics relating to the conduct of business. The emphasis will be on spoken skills, with provision for an optional reading component.

**401-402 Advanced Japanese Reading**

401, fall; 402, spring. 4 credits each term.

Prerequisites: for Japanese 401, Japanese 302 or placement by the instructor during registration; for Japanese 402, Japanese 401 or placement by the instructor during registration.

M W F 2:30 or 3:35. K. Smith and K. Selden.

Reading of selected modern texts with emphasis on expository style.

**[404 Linguistic Structure of Japanese**

Spring. 4 credits. Prerequisites: Japanese 102 or permission of instructor, and Linguistics 101, or equivalent introductory course in linguistics. Not offered 1990-91.

Hours to be arranged. J. Whitman.]

**407-408 Oral Narration and Public Speaking**

407, fall; 408, spring. 2 credits each term.

Prerequisites: for Japanese 407, Japanese 304 or placement by the instructor during registration; for Japanese 408, Japanese 407 or placement by the instructor during registration.

T R 1:25. K. Noguchi.

Instruction in storytelling, lecturing, and speechmaking, with emphasis on both the construction of discourse and Japanese patterns of oral delivery.

**[410 History of the Japanese Language**

Fall. 4 credits. Prerequisite: Permission of instructor. Offered alternate years. Not offered 1990-91.

Hours to be arranged. J. Whitman.

An overview of the history of the Japanese language followed by intensive examination of issues of interest to the participants. Students should have a reading knowledge of Japanese or a background in historical or comparative linguistics. Interests of both groups will be addressed.]

**421-422 Directed Readings**

421, fall; 422, spring. Credit to be arranged. Limited to advanced students and offered according to staff-time availability. Prerequisite: placement by the instructor during registration.

Hours to be arranged. Staff.

Topics are selected on the basis of student needs.

**543-544 Intermediate Japanese for Business Purposes**

543, fall; 544, spring. 4 credits. For graduate students only.

Hours to be arranged.

Training in listening and speaking for students who have acquired basic oral proficiency.

**545-546 Advanced Japanese for Business Purposes**

For graduate students only; undergraduates register for Japanese 341-342.

Hours to be arranged. Staff.

For description see Japanese 341-342.

**FALCON**

R. Sukle, 412 Morrill Hall (255-0734)

**161-162 Intensive Japanese (FALCON)**

161, fall; 162, spring. 16 credits each term. Prerequisites: for Japanese 161, Japanese 102 or 160 (Cornell summer intensive course) at Cornell, or placement by the instructor during registration; for Japanese 162, Japanese 161 at Cornell or placement by the instructor during registration.

M-F, 6 hours each day. R. Sukle and staff.

**Javanese****131-132 Elementary Course**

131, fall; 132, spring. 3 credits each term. Prerequisite: for Javanese 132, Javanese 131 or equivalent.

Hours to be arranged. J. U. Wolff.

An elementary language course for those who have had no previous experience in the language.

**133-134 Continuing Course**

133, fall; 134, spring. 3 credits each term. Prerequisites: for Javanese 133, Javanese 132 or equivalent; for Javanese 134, Javanese 133 or equivalent.

Hours to be arranged. J. U. Wolff.

**203-204 Directed Individual Study**

203, fall; 204, spring. 3 credits. Prerequisite: Javanese 134 or equivalent.

Hours to be arranged. J. U. Wolff.

This is a practical language course on an intermediate level in which the students will work through readings and conversations under the guidance of a native speaker for three contact hours a week.

**Old Javanese**

See Linguistics 651-652.

**Khmer (Cambodian)****101-102 Elementary Course**

101, fall; 102, spring. 6 credits each term. Prerequisite: for Khmer 102: Khmer 101 or equivalent.

Hours to be arranged. G. Diffloth.

**201-202 Intermediate Khmer Reading**

201, fall; 202, spring. 3 credits each term. Prerequisites: for Khmer 201, Khmer 102; for Khmer 202, Khmer 201.

Hours to be arranged. G. Diffloth.

**203-204 Intermediate Composition and Conversation**

203, fall; 204, spring. 3 credits each term. Prerequisites: for Khmer 203, Khmer 102; for Khmer 204, Khmer 203.

Hours to be arranged. G. Diffloth.

**301-302 Advanced Khmer**

301, fall; 302, spring. 4 credits each term. Prerequisites: for Khmer 301, Khmer 202 or equivalent; for Khmer 302, Khmer 301.

Hours to be arranged. G. Diffloth.

**[401-402 Directed Individual Study**

401, fall; 402, spring. For advanced students. 4 credits each term. Prerequisite: permission of instructor. Not offered 1990-91.

Hours to be arranged. G. Diffloth.]

**[404 Structure of Khmer**

Spring. 4 credits. Prerequisite: Linguistics 101-102 or equivalent. Not offered 1990-91.

Hours to be arranged. G. Diffloth.]

**Korean****101-102 Elementary Korean**

101, fall; 102, spring. 4 credits.

Lec, T R 9:05; drills: M T W R 8, 11:15, or 3:35. H. Diffloth.

Covers basics of speaking, reading, and writing. Introduces Hangul writing system and rudiments of grammar.

**201-202 Intermediate Korean**

201, fall; 202, spring. 4 credits.

Lec, T 1:25; Sec, M W R 1:25. H. Diffloth.

Covers the basics of speaking, reading, and writing at the intermediate level. Introduces some reading and writing with Chinese characters.

**Latin**

See listings under Classics.

**Linguistics**

Linguistics, the systematic study of human speech, lies at the crossroads of the humanities and the social sciences, and much of its appeal derives from the special combination of intuition and rigor that the analysis of language demands. The interests of the members of the Department of Modern Languages and Linguistics span most of the major subfields of linguistics, phonetics and phonology, the study of speech sounds; syntax, the study of sentence structure; semantics, the study of meaning; historical linguistics, the study of language change in time; sociolinguistics, the study of language as a social and cultural artifact; and applied linguistics, which relates the results of linguistic research to problems of bilingual education, second-language learning, and similar practical concerns.

Studying linguistics is not a matter of studying many languages. Linguistics is a theoretical discipline with ties to such areas as cognitive psychology, philosophy, logic, computer science, and anthropology. Nonetheless, knowing particular languages (e.g., Spanish or Japanese) in some depth can enhance understanding of the general properties of human language. Not surprisingly, then, many students of linguistics owe their initial interest to a period of exposure to a foreign language,

and those who come to linguistics by some other route find their knowledge about languages enriched and are often stimulated to embark on further foreign language study.

Students interested in learning more about linguistics and its relationship to other disciplines in the humanities and social sciences are encouraged to take Linguistics 101-102, which is a prerequisite for most other courses in the field. The Cornell Linguistic Circle, a student organization, sponsors frequent colloquia on linguistic topics; these meetings are open to the university public, and anyone wishing to learn more about linguistics is most welcome to attend.

**The Major**

The prerequisite for a major in linguistics is completion of Linguistics 101-102. The major has its own language requirement, which should be completed as early as possible: qualification in two languages other than English, one of which must be non-European or non-Indo-European. With approval of the department's director of undergraduate studies, this requirement may be waived (i.e., reduced to the normal arts college language requirement) for students taking the cognitive studies concentration or a double major.

The other requirements for the linguistics major are:

- 1) Linguistics 301 (phonology), Linguistics 303 (syntax), Linguistics 309 or 310 (morphology), and Linguistics 410 (historical linguistics)
- 2) a course at or beyond the 300 level in the structure of English or some other language or a typological or comparative structure course such as Linguistics 401
- 3) two additional linguistics courses totaling at least 8 credits, one of which may be a course with significant linguistic content in a related field.

Prospective majors should see Professor Cohn, 216 Morrill Hall.

For other courses relevant to linguistics, see anthropology, psychology, human development and family studies, computer science, cognitive studies, and philosophy.

**Honors.** Applications for honors should be made during the junior year. Candidates for admission must have a 3.0 (B) average overall and should have a 3.2 average in linguistic courses. In addition to the regular requirements of the major, the candidate for honors will complete an honors thesis and take a final oral examination in defense of it. The thesis is usually written during the senior year but may be begun in the second term of the junior year when the student's program so warrants. The oral examination will be conducted by the honors committee, consisting of the thesis adviser and at least one other faculty member in linguistics. Members of other departments may serve as additional members if the topic makes this advisable. Linguistics 493 and 494 may be taken in conjunction with thesis research and writing but are not required.



**Distribution Requirement**

The distribution requirement in the social sciences may be satisfied by taking Linguistics 101 and (1) any other course in linguistics or (2) any other course offered by the Department of Modern Languages and Linguistics for which this introductory linguistics course is a prerequisite.

*Note: See also courses on the structure and history of particular languages or language families listed at the end of this section.*

**101 Theory and Practice of Linguistics**

101, fall, spring or summer. 4 credits each term  
M W F 10:10; disc to be arranged.  
M. Montalbetti.

An introductory course designed to provide an overview of the science of language, especially its theoretical underpinnings, methodology, and major findings. Linguistics 101 plus any other course in linguistics or any DMLL course for which Linguistics 101 is a prerequisite satisfies the social science distribution requirement.

**113 Dos Worlds-Two Mundos**

113, fall or spring. 3 credits each term.  
Freshman Seminar.

T R 10:10–11:25. A. Toribio.

What does it mean to be a Hispanic bilingual? In this course, we will investigate various aspects of Hispanic bilingualism from the perspective of a wide variety of disciplines—education, history, linguistics, psychology and sociology.

**[118 Varieties of Human Language]**

Spring. 3 credits. Applicable toward the social science distribution requirement.

M W F 10:10. J.E. Grimes.

Language diversity is a fact of our complex world. Whether spoken by a handful of speakers or by hundreds of millions, each language manages the same tasks of communication and fits in with its social environment. Language identification, literacy, and multilingualism are among the issues touched on.]

**121 Language and Gender (also Women's Studies 121)**

Fall and summer. 3 credits. Freshman Seminar.

T R 1:25–2:40. S. McConnell-Ginet.

What does it mean to speak "like a woman" or "like a man," "like a girl" or "like a boy"? Even ten-year-olds in our culture approach similar communicative tasks in gender-differentiated ways: girls often get others to do things by saying things like, "let's get some coat-hangers," whereas their male peers are more likely to say something like "get me a coat-hanger." How do race, social class, age, setting, and aims interact with gender in affecting communicative style? How do our ways of writing and talking reflect and perpetuate gender stereotypes or biases? What is the role of sex and gender in language change?

**123 Language in a Changing World**

Fall or spring. 3 credits. Freshman seminar.

T R 11:40–12:55. D. Silva.

Language connects individual human minds in larger social groups. Not surprisingly, we find diversity and change in language both reflecting and creating diversity and change in society. Sociolinguistic history is revealing. Writing assignments will explore facts and theories as well as fiction about the linguistic dimensions of social change and the historical shaping of language, drawing on assigned readings and class discussion.

**125 Women, Fire, and Dangerous Things**

Spring. 3 credits. Freshman seminar.

Hours to be arranged. A. Wyner.

This course will explore the way we use language to express our ideas and feelings of ourselves, other people, and the objects and events we see around us. The course will encourage close scrutiny of language and thought, developing attention to linguistic categorizations of experience.

**201 Introduction to Phonetics and Phonology**

Spring. 4 credits. Prerequisite: Linguistics 101 or equivalent or permission of instructor.

M W F 11:15. A. Cohen.

An introduction to the study of human speech sounds and how they pattern in languages. The first part of the course will focus on phonetics: the production, acoustics, and perception of speech, with attention to both the common and the less common sounds of the world's languages. The second part of the course will focus on phonology: how human speech sounds pattern within and across languages, with an emphasis on the rules that govern these patterns and their possible representation.

**[244 Language and Gender/Sex (also Women's Studies 244)]**

Spring. 4 credits. For non-majors or majors.  
Not offered 1990–91.

Hours to be arranged.

S. McConnell-Ginet.

This course explores connections between language (use) and gender/sex systems, addressing such questions as the following. How do sex and gender affect the ways we speak, the ways we interpret and evaluate speech? How do sociocultural differences in women's and men's roles affect their language use, their relation to language change? What is meant by sexist language? How does conversation structure the social worlds of women and men? Readings draw from work in linguistics, anthropology, philosophy, psychology, literature, and general women's studies and feminist theory.]

**[264 Language, Mind, and Brain]**

Fall. 4 credits. For non-majors or majors.

Prerequisite: a basic course in linguistics and/or psychology is desirable. Not offered 1990–91.

T R 1:25–2:40. J. S. Bowers.

An introductory course that emphasizes the formal structure of natural language and its biological basis. The following topics are covered: the formal representation of linguistic knowledge, principles and parameters of universal grammar, the basic biology of language, mechanisms of linguistic performance, the modularity hypothesis, and language and cognition. This course is especially suited for majors in fields such as psychology, philosophy, computer science, and linguistics (and also for those enrolled in the concentration in cognitive studies) who want to take a one-semester introduction to linguistics that concentrates on the formal principles that govern linguistic knowledge, along with some discussion of their biological realization and their use in perception and production.]

**300 Multilingual Societies and Cultural Policy**

Fall. 4 credits.

T R 2:55–4:10. D. F. Solá.

An interdisciplinary analysis of the impact of bilingualism on society, particularly in education and communication arts. The FLEX model is used to suggest a method of evaluating policy and program alternatives.

**301–302 Phonology I, II**

301, fall; 302, spring. 4 credits each term.

Prerequisites: for Linguistics 301, Linguistics 102; for Linguistics 302, Linguistics 301 or permission of instructor.

M W 2:30–3:45. N. Clements.

An introduction to contemporary phonology, which studies the system of rules and representations underlying the human ability to produce and understand speech; 301: an overview of descriptive phonetics and phonetic transcription, the phoneme, principles of phonological analysis, phonological rules and their interaction, distinctive features, and the syllable. 302: using American English as a case study, explores in detail the nature of rule systems and rule interaction, levels of representation, stratal organization of phonological rules, lexical and morphological conditioning of rules, and the relation between phonology and syntax.

**303–304 Syntax I, II**

303, fall; 304, spring. 4 credits each term.

Prerequisites: for Linguistics 303, Linguistics 102; for Linguistics 304, Linguistics 303 or permission of instructor.

T R 10:10–11:25. J. S. Bowers.

303 is an introduction to syntactic theory, with emphasis on the classical theory of transformational grammar. 304 is an advanced course, surveying current syntactic models and dealing with such issues as the nature of syntactic representation, levels of representation, principles of universal grammar, and the relation of syntax and semantics.

**[306 Functional Syntax]**

Fall. 4 credits. Prerequisite: Linguistics 102 or permission of instructor. Not offered 1990–91.

M W F 9:05. D. F. Solá.

A general survey of syntactic theories that highlight grammatical function and reveal its role in discourse structure.]

**309–310 Morphology I, II**

309, fall; 310, spring. 4 credits each term.

Prerequisite: Linguistics 102 or equivalent or permission of instructor.

T R 11:40–12:55. Fall: L. Waugh; spring: staff.

309 is a general survey focusing on the relationship of meaning and form in morphology and introducing techniques of morphological analysis. Current research on form meaning questions is discussed. 310 considers recent discussions in morphological theory.

**[311–312 The Structure of English]**

311, fall; 312, spring. 4 credits each term.

Prerequisites: for Linguistics 311, Linguistics 102 or permission of instructor; for Linguistics 312, Linguistics 311 or permission of instructor. Not offered 1990–91.

M W F 11:15. S. McConnell-Ginet.

311 provides an overview of the syntactic structure of English, drawing upon relevant theoretical approaches. 312 deals with phonology, morphology, and special problems of English structure and semantics.]

**[313 English for Teachers of English]**

Fall. 4 credits. Prerequisites: for undergraduate majors, Linguistics 101–102 or equivalent; for graduate students, concurrent registration in Linguistics 101 or equivalent.

M W F 11:15, plus one hour to be arranged. M. Martin. Not offered 1990–91.

A course in modern English for teachers of non-native speakers. An analysis of the phonetics, grammar, and semantics of the language in terms applicable to both classroom teaching and materials development.]

**[314 Teaching English as a Foreign Language]**

Spring. 4 credits. Prerequisite: Linguistics 313. M W F 11:15, plus one hour to be arranged. M. Martin. Not offered 1990–91.

Methods and techniques used in the teaching of English language skills to non-native speakers are examined. Attention is given to materials design and to current issues and new trends in the fields.]

**[316 Introduction to Mathematical Linguistics]**

Spring. 4 credits. Prerequisite: Linguistics 101–102 or equivalent. Offered alternate years. Not offered 1990–91.

Hours to be arranged. F. Landman.

The course is an introduction to the mathematical concepts and techniques most frequently used in theoretical linguistics. Topics will include the following: elementary set theory, elementary logic, formal systems and algorithms, and trees, automata, and formal grammars. The course is designed for students who are interested in formal linguistics but feel they have a weak mathematical background. It presupposes no previous knowledge of formal methods and it will try to overcome any "anxiety" that such methods may give rise to.]

**[319 Phonetics I]**

Fall. 3 credits. Not offered 1990–91. M W F 10:10; disc to be arranged.

J. Kingston.

An introduction to phonetic theory, with an equal emphasis on the general properties of speech production, acoustics, and perception. Training in production and transcription in a discussion section, in conjunction with Linguistics 301.]

**[320 Phonetics II]**

Spring. 3 credits. Prerequisite: Linguistics 319. Not offered 1990–91.

M W F 10:10; disc to be arranged. J. Kingston.

Surveys current controversies in research on articulation, acoustics, or perception. Possible topics include: phonetic explanation in phonology; testing of the psychological reality of theoretical constructs in phonology; and phonetic implementation of phonological representations.]

**[321 History of the Romance Languages]**

Fall. 4 credits. Prerequisites: Linguistics 101 or equivalent, and qualification in any Romance language. Offered alternate years. Not offered 1990–91.

M W F 1:25. C. Rosen.

Popular Latin. Pan-Romance trends in phonology, morphology, syntax, and the lexicon. Regional divergence. Non-Latin influences. Medieval diglossia and emergence of Romance standards.]

**[323 Comparative Romance Linguistics]**

Fall. 4 credits. Prerequisites: Linguistics 101 or equivalent, and qualification in any Romance language. Offered alternate years.

M W F 1:25. C. Rosen.

The Romance language family in a typological perspective. Salient features of eight Romance languages; broad and localized trends in phonology, syntax, and the lexicon; and elements of dialectology.]

**[325 Pragmatics]**

Fall. 4 credits. Prerequisite: Linguistics 102 or permission of instructor. Not offered 1990–91.

M W F 10:10. S. McConnell-Ginet.

An introduction to the study of such topics as speech acts, presupposition, deixis, implicatures, and conversational strategies.]

**[334 Non-Linear Syntax]**

Spring. 4 credits. Prerequisite: Linguistics 303 or equivalent.

M W F 11:15. C. Rosen.

Analyses of some twenty diverse languages are examined with the aim of building a formal account of the syntactic constructions existing in the world's languages, and discerning universals that delimit this inventory. Non-linear theory, designed for comparative work, depicts constructions in the abstract, not imagining them as arrays of elements in space. Simultaneously it studies the morphosyntactic systems that relate constructions to their linear realizations.]

**[366 Spanish in the United States (also Spanish 366)]**

Fall. 4 credits. Prerequisite: some knowledge of Spanish. Offered alternate years. Not offered 1990–91. Applicable toward the social science distribution requirement.

Hours to be arranged. M. Suner.

Examination of major Spanish dialects in the United States from a linguistic perspective. Contrast with the standard language. Borrowing, interference, and code switching. Syntactic, morphological, and phonological characteristics. Sex-related phenomena.]

**[370 Language and Cognition (also Psychology 370)]**

Spring. 4 credits. Prerequisites: Linguistics 101 or 264 or Psychology 215, or permission of one of the instructors. Not offered same years as Psychology 416.

T R 1:25–2:40. J. Bowers, H. Kurtzman.

Examination of current research on selected topics on language from both linguistic and psychological perspectives. Topics may include: Universal Grammar and language acquisition, syntactic parsing, word recognition, sentence production, aphasia, and schizophrenic language.]

**[400 Semiotics and Language (also Comparative Literature 410)]**

Spring. 4 credits. Prerequisite: some background in an area relevant to semiotics: e.g., linguistics, philosophy, psychology, anthropology, or literature: or permission of instructor.

Hours to be arranged. L. Waugh.

An introduction to the study of semiotics in general and to particular semiotic theories (for example, those of Saussure, Peirce, Jakobson) and to language as a semiotic system. The particular topics to be discussed will depend on the interest of the students.]

**[401 Language Typology]**

Fall. 4 credits. Prerequisite: Linguistics 102 or equivalent.

M W F 10:10. J. Whitman.

Study of a basic question of contemporary linguistics: in what ways do languages differ, and in what ways are they all alike? Efforts to formalize universals of syntax and to characterize the total repertory of constructions available to natural languages. Common morphological devices and their syntactic correlates. Emphasis on systems of case, agreement, and anaphora.]

**[402 Languages in Contact]**

Fall. 4 credits. Prerequisite: Linguistics 102 or permission of instructor. Offered alternate years.

M W F 9:05. H. L. Kufner.

Examination of a variety of areas where languages exhibit interference phenomena: diglossia, bilingualism, dialects, second-language acquisition.]

**[405–406 Sociolinguistics]**

405, fall; 406, spring. 4 credits each term.

Prerequisite: Linguistics 102 or permission of instructor. Linguistics 405 is not a prerequisite to 406.

Hours to be arranged. Staff.

405: Social differences in the use of language according to sex, class, age, race, situation, etc. Societal multilingualism, diglossia, etc. Social attention to language: norms and standards, taboo and euphemism, and language planning. 406: the study of language variation. Theoretical and methodological issues in the study of sociolinguistic differences. Variable rules, locating variation in the grammar, and quantitative methods in linguistics.]

**[410 Introduction to Historical Linguistics]**

Spring. 4 credits. Prerequisite: Linguistics 102 or permission of instructor.

M W F 10:10. J. Jasanoff.

A survey of the basic mechanisms of linguistic changes, with examples from a variety of languages.]

**[412 Process and Knowledge in Speech Perception and Word Recognition]**

Spring. 4 credits. Prerequisite: Linguistics 319 or permission of instructor. Not offered 1990–91.

T R 1:25–2:40. J. Kingston.

This course examines how speech sounds are received and how words are recognized. The focus in the discussion of speech perception is on the question of whether speech perception requires mechanisms which are unique to it, or if instead general auditory mechanisms are sufficient. Word recognition is examined in terms of the role of phonetic and phonological processes, structures, and knowledge in recognizing words.]

**[415–416 Social Functions of Language]**

415, fall; 416, spring. 4 credits each term.

Prerequisites: Linguistics 102 or permission of instructor. Not offered 1990–91.

Hours to be arranged. Staff.

The function of language in society; social constraints on linguistic behavior, including taboos, jargons, registers, social and socially perceived dialects.]

**[417 History of the English Language]**

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1990–91.

Hours to be arranged. Staff.

Development of modern English; external history; phonological, grammatical, and lexical change. The English language in America.]

**418 Nonlinear Phonology**

Fall. 4 credits. Prerequisite: Linguistics 302.  
M W 4-5:15. A. Cohn.

Explores a comprehensive model of phonological description arising out of work in autosegmental and metrical phonology. Particular topics include tone systems, syllable structure, quantity, stress and intonation, vowel harmony, and feature organization. These topics are related to fundamental issues in phonological theory such as naturalness, markedness, learnability, and universals.

**[420 Fundamentals of Speech Acoustics]**

Spring, according to demand. 4 credits.  
Prerequisites: Linguistics 319 and at least 1 year of college calculus, including the mathematics of complex variables. Not offered 1990-91.

T R 10:10-11:25. J. Kingston.

This course develops a model of vocal tract acoustics, based on the fundamental principles of acoustic theory.]

**421-422 Semantics I, II**

421, fall; 422, spring. 4 credits each term.  
Prerequisites: for Linguistics 421, Linguistics 102; for Linguistics 422, Linguistics 421 or permission of instructor.

T R 2:55-4:10. Fall: F. Landman. Spring: G. Chierchia.

421: an introduction to semantics of natural language. The course starts from basic foundational questions concerning the nature of meaning and the empirical domain of semantic theory. Truth-conditional and logical theories and their application to the investigation of the structure of natural languages are extensively explored (with some comparisons with other approaches). Through the study of quantification, scope, anaphora, modalities, presuppositions, and the like, one tries to gain insight into general characteristics of the cognitive apparatus that is at the basis of our capacity for understanding sentences.

422: guides students into current work in semantic theory. The first half of the course is an introduction to Montague-style semantics, whose influence on current research is quite extensive. The second half of the course focuses on selected topics that have grown out of (and sometimes against) classical Montague semantics. Such topics are usually drawn from the following: generalized quantifiers and anaphora, type-shifting, problems of tense and aspect, the linguistic relevance of algebraic approaches to properties, propositions, events and thematic roles, and discourse representation theory.

**[423-424 The Structure of Turkish]**

423, fall; 424, spring. 4 credits each term.  
Prerequisites: Linguistics 303-304 or equivalent. Not offered 1990-91.

Hours to be arranged. L. H. Babby.

The purpose of Linguistics 423-424 is to familiarize students of linguistics with a language whose structure is radically different from that of the familiar Indo-European languages and to evaluate its contribution to current linguistics theory. Linguistics 423 introduces the basic phonology, morphology, and syntax of Turkish, along with the special problems of agglutinative morphology and left-branching (SOV) syntax. Among the topics covered are: causativization, passive, phrase-structure, case and semantic roles, word order, the syntax of non-finite categories, and the auxiliary system. Linguistics 424 is devoted to recent monographs dealing with Turkish and its contribution to current linguistic theory and

to the reading and analysis of selected Turkish prose texts.]

**[425-426 Structure of Bantu I and II]**

425, fall; 426, spring. 4 credits each term.  
Prerequisites: for Linguistics 425, Linguistics 301 or permission of instructor; for Linguistics 426, Linguistics 303 and 425 or permission of instructor. Not offered 1990-91.

Hours to be arranged. G. N. Clements.

425 is an introduction to descriptive and historical Bantu linguistics. Following a review of basic features of Proto-Bantu grammar and lexicon, we examine the phonology and morphology of a selected Bantu language with the help of a native speaker assistant. 426 is a sequel to Linguistics 425 and investigates aspects of Bantu syntax and its relation to phonology, morphology, and discourse function.]

**430 Structure of Korean**

Spring. 4 credits. Offered alternate years.

Hours to be arranged. J. Whitman.

Intensive examination of the syntax and phonology of a non-Indo-European language with the objective of testing principles of current linguistic theory. No previous knowledge of Korean required.

**[436 Language Development (also Psychology 436 and Human Development and Family Studies 436)]**

Spring. 4 credits. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. Offered alternate years. Not offered 1990-91.

T R 11:40-12:55. B. Lust.

A survey of basic issues, methods, and research in study of first-language acquisition. Major theoretical positions in the field are considered in the light of experimental studies in first-language acquisition of phonology, syntax, and semantics from infancy on. The fundamental linguistic issues of universal grammar and the biological foundations for acquisition are discussed, as are the issues of relations between language and thought. The acquisition of communication systems in nonhuman species such as chimpanzees are addressed, but major emphasis is on the child.]

**[440 Dravidian Structures]**

Spring, according to demand. 4 credits.  
Prerequisite: Linguistics 102.

Hours to be arranged. Staff.

A comparative and contrastive analysis of the structures of several Dravidian languages.]

**[442 Indo-Aryan Structures]**

Fall, according to demand. 4 credits. Prerequisite: Linguistics 102.

Hours to be arranged. J. W. Gair.

Typological discussion of the languages of the subfamily. Specific topics and emphasis may vary depending on the interest of the students.]

**[443-444 Linguistic Structure of Russian (also Russian 403-404)]**

443, fall; 444, spring. 4 credits each term.  
Prerequisite for Linguistics 443: permission of instructor, Linguistics 101-102 recommended. Prerequisite for Linguistics 444: Linguistics 443 or equivalent. Offered alternate years. Not offered 1990-91.

T R 10:10-11:40. L. H. Babby.

A synchronic analysis of the structure of modern Russian. Linguistics 443 deals primarily with morphology and its relation to syntax and 444 with syntax and word order.

Topics covered include case theory, the functions of word order, voice, agreement, impersonal constructions, negation, nonuniversal categories, and the relation between morphology and syntax.]

**[450 Computational Linguistics]**

Fall. 4 credits. Prerequisite: Linguistics 303. Not offered 1990-91.

Hours to be arranged. F. Landman.

In this course we will study questions concerning the generative capacity, learnability, and parsing of different syntactic models. Some knowledge of recent developments in syntax is important. Some knowledge of mathematical linguistics may be helpful, but is not required. The course is meant for graduate students and advanced undergraduate students in linguistics, but may also be of interest to students in psychology/psycholinguistics, computer science, and cognitive studies.]

**493 Honors Thesis Research**

Fall. 4 credits.

Hours to be arranged. Staff.

May be taken before or after Linguistics 494, or may be taken independently.

**494 Honors Thesis Research**

Spring. 4 credits.

Hours to be arranged. Staff.

May be taken as a continuation of, or before, Linguistics 493.

**600 Field Methods**

Fall or spring. 4 credits. Prerequisites: Linguistics 101 or 319.

Hours to be arranged. G. Diffloth.

Elicitation, recording, and analysis of data from a native speaker of a non-Western language not generally known to students.

**601 Topics in Phonological Theory**

Spring. 4 credits. Prerequisites: Linguistics 301 and one other course in phonology.

Hours to be arranged. N. Clements.

Selected topics in current phonological theory.

**[603 History of Linguistics]**

Fall. 4 credits. Not offered 1990-91.

Hours to be arranged. Staff.

The history of linguistics from early Greek and Sanskrit grammarians to the modern period.]

**604 Research Workshop**

Spring. 4 credits. Prerequisite: three or more semesters of graduate study in linguistics.

Hours to be arranged. Staff.

Participants will present their own ongoing research and discuss it with their colleagues. Individual topics will be chosen on the basis of interest, experience, and probable focus of dissertation research.

**[608 Discourse Analysis]**

Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1990-91.

M 2:30-4:30. J. E. Grimes.

Linguistic theory applied to relationships beyond the sentence.]

**[609 Greek Comparative Grammar (also Classics 421)]**

Fall. 4 credits. Prerequisite: thorough familiarity with the morphology of classical Greek. Not offered 1990-91.

M W F 10:10. A. Nussbaum.

The prehistory and evolution of the sounds and forms of ancient Greek as reconstructed by comparison with the other Indo-European languages.]

**[610 Latin Comparative Grammar (also Classics 422)]**

Fall or spring. 4 credits. Prerequisite: thorough familiarity with the morphology of classical Latin. Not offered 1990-91.

Hours to be arranged. A. Nussbaum.  
The prehistory and evolution of the sounds and forms of classical Latin as reconstructed by comparison with the other Indo-European languages.]

**[611 Greek Dialects (also Classics 425)]**

Fall or spring. 4 credits. Not offered 1990-91.  
M W F 9:05. A. Nussbaum.

A survey of the dialects of ancient Greek through the reading and analysis of representative epigraphical and literary texts.]

**[612 Italic Dialects (also Classics 424)]**

Fall. 4 credits. Not offered 1990-91.  
T R 11:40-12:55. A. Nussbaum.

The phonology and morphology of Faliscan, Oscan, and Umbrian studied through the reading of epigraphical texts. Attention to the relations of these languages to Latin and the question of proto-Italic.]

**[613 Homeric Philology (also Classics 427)]**

Fall or spring. 4 credits. Prerequisite: ability to read Homeric Greek. Not offered 1990-91.

Hours to be arranged. A. Nussbaum.  
The language of the Homeric epics: dialect background, archaisms, epicisms, and modernizations. The notion of a *Kunst-sprache*: its constitution, use, and internal consistency. The phonological and morphological aspects of epic compositional technique.]

**[614 Archaic Latin (also Classics 426)]**

Spring. 4 credits. Prerequisite: reading knowledge of Latin. Not offered 1990-91.

Hours to be arranged. A. Nussbaum.  
Reading of epigraphic and literary preclassical texts with special attention to archaic and dialectal features. The position of Latin among the Indo-European languages of ancient Italy, the rudiments of Latin historical grammar, and aspects of the development of the literary language.]

**[615 Mycenaean Greek (also Classics 429)]**

Fall or spring. 4 credits. Prerequisite: thorough familiarity with the morphology of classical Greek. Not offered 1990-91.

Hours to be arranged. A. Nussbaum.  
An introduction to the epigraphy, language, and content of the Linear B tablets with special attention to their implications for Greek historical grammar and dialectology.]

**[617-618 Hittite]**

617, fall; 618, spring. 4 credits each term.  
Prerequisites: for Linguistics 617, permission of instructor; for Linguistics 618, Linguistics 617 or permission of instructor. Not offered 1990-91.

Hours to be arranged. J. Jasanoff.]

**[619 Rigveda]**

Fall. 4 credits. Not offered 1990-91.

Hours to be arranged. J. Jasanoff.  
Reading and linguistic analysis of selected Vedic hymns.]

**[620 Area Topics in Romance Linguistics]**

Spring. 4 credits. May be repeated for credit. Offered alternate years.

Hours to be arranged. C. Rosen.  
Topic for 1991: reading and linguistic analysis of selected early Romance texts.

**[621 Problems and Methods in Romance Linguistics]**

Spring. 4 credits. Prerequisites: one syntax course and qualification in two Romance languages. Offered alternate years. Not offered 1990-91.

Hours to be arranged. C. Rosen.  
Central topics in Romance syntax in the light of current theories of universal grammar.]

**[623-624 Old Irish]**

623, fall; 624, spring. 4 credits each term.  
Prerequisite for 624: 623 or permission of instructor. Not offered 1990-91.

Hours to be arranged. J. Jasanoff.]

**[625-626 Middle Welsh]**

625, fall; 626, spring. 4 credits each term.  
Prerequisites: for Linguistics 625, knowledge of one ancient or medieval European language or permission of instructor; for Linguistics 626, Linguistics 625 or equivalent. Not offered 1990-91.

Hours to be arranged. Staff.]

**[627 Advanced Old Irish]**

Spring. 3 credits. Prerequisite: one year of Old Irish. Not offered 1990-91.

Hours to be arranged. Staff.]

**[631 Comparative Indo-European Linguistics]**

Fall. 4 credits. Prerequisite: permission of instructor.

T R 10:10-11:25. J. Jasanoff.

An introduction to the comparative grammar of the Indo-European languages.]

**[633 Seminar in First-Language Acquisition: Cross-linguistic Studies of the Acquisition of Anaphora (also Human Development and Family Studies 633)]**

Fall or spring. 1-4 credits. Prerequisite: Linguistics 436 or equivalent or permission of instructor. Not offered 1990-91.

Hours to be arranged. B. Lust.

This seminar will review and critique current theoretical and experimental studies of the first-language acquisition of anaphora, with a concentration on insights gained by cross-linguistic study of this area. The seminar will focus on relating current developments in linguistic theory regarding anaphora to current experimental research on first-language acquisition of anaphora. Attention will also be given to the development of research proposals.]

**[635-636 Indo-European Workshop]**

635, fall; 636, spring. 4 credits each term.  
Prerequisite: permission of instructor.

Hours to be arranged. Fall:

A. Nussbaum; spring: J. Jasanoff.

An assortment of subjects intended for students with previous training in Indo-European linguistics: problems in the reconstruction of Proto Indo-European, topics in the historical grammars of the various IE languages, reading and historical linguistic analysis of texts, and grammatical sketches of "minor" IE languages.]

**[639-640 Introduction to Pali]**

639, fall; 640, spring. 3 credits each term.  
Hours to be arranged. J. W. Gair.

639 is an introduction to the language of the canonical texts of Theravada Buddhism. Reading of authentic texts with emphasis on both content and grammatical structure. Familiarity with Sanskrit is not required. 640 is a continuation of 639 with further readings.]

**[647-648 Speech Synthesis by Rule]**

647, fall; 648, spring. 4 credits each term.  
Prerequisite: phonology and phonetics or knowledge of computer programming and permission of instructor. Offered alternate years.

Hours to be arranged. S. R. Hertz.  
Linguistics 647 is an introduction to speech synthesis by rule. Particular emphasis will be given to synthesizing English, with a consideration of how to derive phonetic values on the basis of multi-tiered phonological representations (e.g., coordinated phrase, word, syllable, and phoneme units). Students will have first-hand experience synthesizing speech in the Cornell Phonetics Laboratory using the Delta System, which provides a special-purpose programming language for research in non-linear phonology, phonetics, and speech synthesis. Linguistics 648 is a less formal workshop, in which students will use the Delta System to work on selected projects.]

**[651-652 Old Javanese]**

Fall or spring, according to demand. 4 credits.  
Hours to be arranged. J. U. Wolff.

Grammar and reading of basic texts.

**[653-654 Seminar in Southeast Asian Linguistics]**

653, fall; 654, spring. 4 credits each term.  
Prerequisite: Linguistics 303 or permission of instructor. Linguistics 653 is not a prerequisite for 654.

Hours to be arranged. G. Diffloth.  
Languages of mainland Southeast Asia. Topics, chosen according to student interests, may include description, dialectology, typology, comparative reconstruction, and historical studies.

**[655-656 Seminar in Austronesian Linguistics]**

655, fall; 656, spring. 4 credits each term.  
Prerequisites: for Linguistics 655, Linguistics 102 and permission of instructor; for Linguistics 656, Linguistics 655.

Hours to be arranged. J. U. Wolff.  
Descriptive and comparative studies of Malayo-Polynesian languages.

**[657-658 Seminar in Austroasiatic Linguistics]**

657, fall; 658, spring. 4 credits each term.  
Prerequisites: Linguistics 102 or permission of instructor.

Hours to be arranged. G. Diffloth.  
Descriptive and comparative studies of Austroasiatic languages.

**[700 Seminar]**

Fall or spring, according to demand. Credit to be arranged.

Hours to be arranged. Staff.  
Seminars are offered according to faculty interest and student demand. Topics in recent years have included subject and topic, Montague grammar, speech synthesis, lexicography, classical and autonomous phonology, Japanese sociolinguistics, relational grammar, semantics and semiotics, and others.

**[701-702 Directed Research]**

701, fall; 702, spring. 1-4 credits.  
Hours to be arranged. Staff.

**[753 Tibeto-Burman Linguistics]**

Fall. 4 credits. Prerequisites: Linguistics 404 or equivalent, and permission of instructor. Not offered 1990-91.

Hours to be arranged. Staff.  
Comparative reconstruction of Tibeto-Burman with emphasis on the Lolo-Burmese branch and historical study of Burmese.]



**774 Proseminar in Cognitive Studies II (also Computer Science 774)**

Spring. 2 credits.

T R 1:30-3. Staff.

The focus will be on the contribution of linguistics, computer science, and neuroscience to the study of cognition. Topics may include the phonology, syntax, and semantics of natural language; artificial intelligence work in natural language processing, vision, and reasoning; parallel distributed processing; and neuropsychology.

**Additional Linguistics Courses****[Chinese 401 History of the Chinese Language]****[Chinese 403 Linguistic Structure of Chinese I]****[Chinese 404 Linguistic Structure of Chinese II]****[Chinese 405 Chinese Dialects]****[Chinese 607 Chinese Dialect Seminar]****French 401 History of the French Language****[French 407 Applied Linguistics: French]****[French 408 Linguistic Structure of French]****French 410 Semantic Structure of French****[French 602 Linguistic Structure of Old and Middle French]****[French 604 Contemporary Theories of French Grammar]****French 700 Seminar in French Linguistics****German 401 Introduction to Germanic Linguistics****[German 402 History of the German Language]****[German 403 Modern German Phonology]****[German 404 Modern German Syntax]****German 406 Runology****German 407 Applied Linguistics: German****[German 602 Gothic]****German 603 Old High German, Old Saxon****[German 605 Structure of Old English]****[German 606 Topics in Historical Germanic Phonology]****[German 607 Topics in Historical Germanic Morphology]****German 608 Topics in Historical Germanic Syntax****German 609-610 Old Norse****[German 611 Readings in Old High German and Old Saxon]****German 710 Seminar in Germanic Linguistics****[German 720 Seminar in Comparative Germanic Linguistics]****German 730 Seminar in German Linguistics****[Hindi 700 Seminar in Hindi Linguistics]****Indonesian 300 Linguistic Structure of Indonesian****[Italian 403 Linguistic Structure of Italian]****[Italian 631 Readings in Italian Opera Libretti]****[Japanese 404 Linguistic Structure of Japanese]****[Japanese 410 History of Japanese Language]****Khmer 404 Structure of Khmer****Quechua 403 Linguistic Structure of Quechua****Quechua 700 Seminar in Quechua Linguistics****Russian 301-302 Advanced Russian Grammar and Reading****Russian 401-402 History of the Russian Language****[Russian 403-404 Linguistic Structure of Russian]****[Russian 601 Old Church Slavic]****[Russian 602 Old Russian]****[Russian 651-652 Comparative Slavic Linguistics]****Russian 700 Seminar in Slavic Linguistics****[Spanish 401 History of the Spanish Language]****Spanish 407 Applied Linguistics: Spanish****[Spanish 408 The Grammatical Structure of Spanish]****Spanish 601 Hispanic Dialectology****Spanish 602 Linguistic Structure of Ibero Romance****[Spanish 604 Contemporary Theories of Spanish Grammar]****Spanish 700 Seminar in Spanish Linguistics****Tagalog 300 Linguistic Structure of Tagalog****Nepali****101-102 Elementary Nepali**

101, fall; 102, spring. 6 credits each term.

Prerequisite: for Nepali 102, 101 or examination.

Hours to be arranged. K.S. March and staff.

Intended for beginners. The emphasis is on basic grammar, speaking and comprehension skills, utilizing culturally appropriate materials and texts. Devanagari script for reading and writing is also introduced.

**201-202 Intermediate Nepali Conversation**

201, fall; 202, spring. 3 credits each term.

Prerequisites: for Nepali 201, Nepali 102 or examination; for Nepali 202, Nepali 201 or examination.

Hours to be arranged. K.S. March and staff.

Intermediate instruction in spoken grammar and verbal comprehension skills, with special attention to developing technical vocabularies and other verbal skills appropriate to students' professional fields.

**203-204 Intermediate Nepali Composition**

203, fall; 204, spring. 3 credits each term.

Prerequisites: for Nepali 203, Nepali 102 or examination; for Nepali 204, Nepali 203 or examination.

Hours to be arranged. K.S. March and staff.

A systematic review of written grammar and reading comprehension, with special attention to the technical vocabularies, necessary writing skills, and published materials typical of advanced students' professional fields.

**Pali**

See Linguistics 639-640.

**Polish****131-132 Elementary Course**

131, fall; 132, spring. 3 credits each term.

Prerequisite for Polish 132: Polish 131 or equivalent. Offered alternate years.

M W F 10:10 or 1:25. Staff.

**[133-134 Continuing Course**

133, fall; 134, spring. 3 credits each term.

Prerequisites: for Polish 133, Polish 132 or equivalent; for Polish 134, Polish 133 or equivalent. Offered alternate years. Not offered 1990-91.

Hours to be arranged. E. W. Browne.]

**Portuguese****121-122 Elementary Course**

121, fall; 122, spring. 4 credits each term.

Intended for beginners. Students may attain qualification upon completion of 122 by achieving a satisfactory score on a special examination.

M-F 10:10. J. Oliveira.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

**203-204 Intermediate Composition and Conversation**

203, fall; 204, spring. 3 credits each term.

Prerequisites: for Portuguese 203, Portuguese 122 or permission of instructor; for Portuguese 204, Portuguese 203 or permission of instructor.

M W F 11:15. J. Oliveira.

Conversational grammar review with special attention to pronunciation and the development of accurate and idiomatic oral expression. Includes readings in contemporary Portuguese and Brazilian prose and writing practice.

**303-304 Advanced Composition and Conversation**

303, fall; 304, spring. 4 credits each term.

Prerequisite: for Portuguese 303, Portuguese 204 or equivalent; for Portuguese 304, Portuguese 303 or equivalent.

Hours to be arranged. J. Oliveira.

## Quechua

### 131-132 Elementary Course

131, fall; 132, spring. 3 credits each term. Prerequisite: qualification in Spanish.

Hours to be arranged. D. F. Sola.

A beginning conversation course in the Cuzco dialect of Quechua.

### 133-134 Continuing Course

133, fall; 134, spring. 3 credits each term. Prerequisites: for Quechua 133, Quechua 131-132 or equivalent; for Quechua 134; Quechua 133 or equivalent.

Hours to be arranged. D. F. Sola.

An intermediate conversation and reading course. Study of the Huarochiri manuscript.

### 135-136 Quechua Writing Lab

135, fall; 136, spring. 1 credit each term. Prerequisites: concurrent enrollment in Quechua 131-132 or instructor's approval. Letter grade only.

Hours to be arranged. D. F. Sola.

Computer-assisted drill and writing instruction in elementary Quechua.

### 403 Linguistic Structure of Quechua

Fall. 4 credits.

Hours to be arranged. D. F. Sola.

Survey of the grammatical structure of Quechua dialects.

### 700 Seminar in Quechua Linguistics

Fall or spring. Credit to be arranged. Prerequisite: permission of instructor.

Hours to be arranged. D. F. Sola.

## Romance Linguistics

### [321 History of the Romance Languages

Fall. 4 credits. Prerequisites: Linguistics 101 or equivalent, and qualification in any Romance language. Offered alternate years. Not offered 1990-91.

M W F 1:25. C. Rosen.

For description see Linguistics 321.]

### 323 Comparative Romance Linguistics

Fall. 4 credits. Prerequisites: Linguistics 101 or equivalent, and qualification in any Romance language. Offered alternate years.

M W F 1:25. C. Rosen.

For description see Linguistics 323.

### 620 Area Topics in Romance Linguistics

Spring. 4 credits. May be repeated for credit. Offered alternate years.

Hours to be arranged. C. Rosen.

For description see Linguistics 620.

### [621 Problems and Methods in Romance Linguistics

Spring. 4 credits. Prerequisites: one syntax course and qualification in two Romance languages. Offered alternate years. Not offered 1990-91.

Hours to be arranged. C. Rosen.

For description see Linguistics 621.]

## Rumanian

### [131-132 Elementary Course

131, fall; 132, spring. Offered according to demand. 3 credits. Prerequisite for Rumanian 132: Rumanian 131 or equivalent. Not offered 1990-91.]

### [133-134 Continuing Course

133, fall; 134, spring. Offered according to demand. 3 credits. Prerequisite for Rumanian 134: Rumanian 133 or equivalent. Not offered 1990-91.]

## Russian

L. H. Babby, E. W. Browne, R. L. Leed (director of undergraduate studies, 302 Morrill Hall, 255-2322).

For literature courses see Russian Literature.

### The Russian Major

See Russian Literature.

### Study Abroad

Cornell is an affiliated institution in the Council on International Education Exchange program for Russian language study at Leningrad State University. Cornell students also frequently go on the American Council of Teachers of Russian program in Moscow and other Russian language programs. Opportunities are available for study during the summer, a single semester, or the full year. Further information is available from Professor Patricia Carden or Diane Williams, 236 Goldwin Smith Hall.

Honors. Students taking honors in Russian undertake individual reading and research and write an honors essay.

Fees. Depending on the course, a small fee may be charged for photocopied texts for course work.

### Freshman Writing Seminar Requirement

See Russian Literature.

### Russian and Soviet Studies Major

See "Special Programs and Interdisciplinary Studies," which follows the department listings.

### 101-102 Elementary Course

101, fall; 102, spring. 6 credits each term.

Prerequisite for 102: Russian 101 or equivalent. Intended for beginners or students placed by examination.

Drills, M-F 8, 9:05, 12:20 or 1:25; conversation practice, M W 9:05, 11:15, 1:25 or 3:35 or T R 9:05, 10:10, 11:15 or 2:30. Staff.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

### 123 Continuing Russian

Fall or summer. 4 credits. Limited to students who have previously studied Russian and have a CPT achievement score between 450 and 559 or the equivalent. Satisfactory completion of Russian 123 fulfills the qualification portion of the language requirements.

Recitation, M-F 12:20 or 1:25. Staff.

A prequalification course designed to prepare students for study at the 200 level. Passing this course is equivalent to qualification.

### 203-204 Intermediate Composition and Conversation

203, fall, spring or summer; 204, spring. 3 credits each term. Prerequisite: qualification in Russian (Russian 123 or CPT score 560-649). Prerequisite for Russian 204: Russian 203 or equivalent.

203, fall: M T R F 10:10, 11:15, 2:30 or 3:35; Spring: M T R F 11:15. L. Paperno, S. Paperno, and V. Tsimberov. 204, spring: M T R F 10:10, 11:15, or 2:30. L. Paperno, S. Paperno, and V. Tsimberov.

Guided conversation, composition, reading, pronunciation, and grammar review, emphasizing the development of accurate and idiomatic expression in the language.

### 205-206 Reading Soviet Press

205, fall; 206, spring. 2 credits each term. Prerequisites: qualification in Russian (Russian 102 or 123 or CPT score 560-649). Both semesters must be taken in order to satisfy the proficiency level for the language requirement. This course cannot be used to satisfy the humanities requirement.

M W 10:10. S. Paperno.

Reading unabridged articles on a variety of topics from current soviet periodicals.

*Note: Students placed in the 200-level courses also have the option of taking courses in introductory literature; see separate listings under Russian 201 and 202 for descriptions of these courses, any of which may be taken concurrently with the 203-204 and 205-206 language courses described above. The introductory literature courses are offered by the Department of Russian Literature, and the 203-204 and 205-206 language courses by the Department of Modern Languages and Linguistics.*

### 301-302 Advanced Russian Grammar and Reading

301, fall; 302, spring. 4 credits each term.

Prerequisites: for Russian 301, second-year Russian or permission of instructor; for Russian 302, Russian 301. Offered alternate years.

T R 2:55-4:10. L. H. Babby.

This course is intended primarily to increase the student's active command of difficult Russian syntactic constructions. Special attention is paid to word order, impersonal sentences, voice, negation, participles, gerunds, and also to building active vocabulary through reading modern Russian prose. Problems of phonology are also discussed.

### 303-304 Advanced Composition and Conversation

303, fall; 304, spring. 4 credits each term.

Prerequisites: for Russian 303, Russian 204 or equivalent; for Russian 304, Russian 303 or equivalent.

M W F 10:10 or 2:30. L. Paperno, S. Paperno, and V. Tsimberov.

Grammar review, reading, viewing, and listening to authentic language materials (newspapers, TV, radio).

### 305-306 Directed Individual Study

305, fall; 306, spring. 2 credits. Prerequisites: for Russian 305, Russian 303-304 or equivalent; for Russian 306, Russian 305.

Hours to be arranged. Staff.

### 401-402 History of the Russian Language

401, fall; 402, spring. 4 credits each term.

Prerequisites: for Russian 401, permission of instructor; for Russian 402, Russian 401 or equivalent. Offered alternate years.

T R 10:10-11:25. L. H. Babby.

Phonological, morphological, and syntactic developments from Old Russian to modern Russian.

### [403-404 Linguistic Structure of Russian (also Linguistics 443-444)

403, fall; 404, spring. 4 credits each term.

Prerequisite for Russian 403: permission of instructor, Linguistics 101-102 recommended. Prerequisite for Russian 404: Russian 403 or equivalent. Offered alternate years. Not offered 1990-91.

T R 10:10-11:40. L. H. Babby.

A synchronic analysis of the structure of modern Russian. Russian 403 deals primarily with morphology and its relation to syntax and 404 with syntax and word order. Topics

covered include case theory, the functions of word order, voice, agreement, impersonal constructions, negation, nonuniversal and the relation between morphology and syntax.]

#### 407 Russian Phonetics

Fall. 4 credits. Prerequisite: Russian 204.

Hours to be arranged. R. Leed.

Treats both the practical and theoretical aspects of Russian phonetics. Lab work includes the use of the computer for acoustic phonetics, primarily for undergraduate majors in Russian and for graduate students in Slavic linguistics and Russian literature.

#### 413-414 Advanced Conversation and Stylistics

413, fall; 414, spring. 2 credits each term.

Prerequisites: for Russian 413, Russian 303-304 or the equivalent, for Russian 414, Russian 413.

T R 3:35-4:25. L. Paperno, S. Paperno, or V. Tsimberov.

Discussion of authentic unabridged Russian texts and TV series in a variety of nonliterary styles and genres.

#### [601 Old Church Slavic

Fall. 4 credits. This course is prerequisite to Russian 602. Offered alternate years. Not offered 1990-91.

M W F 10:10. E. W. Browne.

Grammar and reading of basic texts.]

#### [602 Old Russian Texts

Spring. 4 credits. Prerequisite: Russian 601. Offered alternate years. Not offered 1990-91.

Hours to be arranged. L. H. Babby.

Grammatical analysis and close reading of Old Russian texts.]

#### 633-634 Russian for Graduate Specialists

633, fall; 634, spring. 2 credits each term.

Prerequisite: four years of college Russian. For graduate students only.

Hours to be arranged. L. Paperno and S. Paperno.

The course is designed for graduate students who specialize in an area of Russian studies requiring fine active control of the language. Students will have an opportunity to speak formally and informally on topics in their specialty. Fine points of syntax, usage, and style will be discussed.

#### [651-652 Comparative Slavic Linguistics

651, fall; 652, spring. 4 credits each term.

Prerequisites: for Russian 651, Russian 601 taken previously or simultaneously or permission of instructor; for Russian 652, Russian 651 or permission of instructor. Offered alternate years. Not offered 1990-91.

Hours to be arranged. E. W. Browne.

Sounds and forms of the Slavic languages and of prehistoric common Slavic; main historical developments leading to the modern languages.]

#### 700 Seminar in Slavic Linguistics

Offered according to demand. Variable credit.

Hours to be arranged. Staff.

Topics chosen according to the interests of staff and students.

## Sanskrit

### [131-132 Elementary Sanskrit (also Classics 131-132)

131, fall; 132, spring. 3 credits each term. Not offered 1990-91.

M W F 2:30. C. Minkowski.]

### 251-252 Intermediate Sanskrit (also Classics 251-252)

251, fall; 252, spring. 3 credits each term.

Prerequisite: Sanskrit 132 or equivalent.

Hours to be arranged. C. Minkowski.

Readings from the literature of Classical Sanskrit. Fall: Selections from the two Sanskrit epics, the Mahabharata and the Ramayana. Spring: More selections from the epics and selections from either Sanskrit story literature or from Sanskrit dramas.

## Serbo-Croatian

### 131-132 Elementary Course

131, fall; 132, spring. 3 credits each term.

Prerequisite for Serbo-Croatian 132: Serbo-Croatian 131 or equivalent. Offered alternate years.

Hours to be arranged. Staff.

### [133-134 Continuing Course

133, fall; 134, spring. 3 credits each term.

Prerequisites: for Serbo-Croatian 133, Serbo-Croatian 132 or equivalent; for Serbo-Croatian 134, Serbo-Croatian 133 or equivalent. Not offered 1990-91.

Hours to be arranged. Staff.]

## Sinhala (Sinhalese)

### 101-102 Elementary Course

101, fall; 102, spring. 6 credits each term.

Prerequisite for Sinhala 102: Sinhala 101 or equivalent.

Hours to be arranged. J. W. Gair and staff.

A semi-intensive course for beginners. A thorough grounding is given in all the language skills; listening, speaking, reading, and writing.

### 201-202 Intermediate Sinhala Reading

201, fall; 202, spring. 3 credits each term.

Prerequisites: for Sinhala 201, Sinhala 102; for Sinhala 202, Sinhala 201 or equivalent.

Hours to be arranged. J. W. Gair and staff.

### 203-204 Intermediate Composition and Conversation

203, fall; 204, spring. 3 credits each term.

Prerequisites: for Sinhala 203, Sinhala 102 or permission of instructor; for Sinhala 204, Sinhala 203 or equivalent.

Hours to be arranged. J. W. Gair and staff.

## Related Courses

See also Linguistics 442, 631, 639, 640.

## Spanish

M. Suñer (director of undergraduate studies, 218 Morrill Hall, 255-0714).

For advanced Spanish language and literature courses see Romance Studies.

## The Major

The major is designed to give students proficiency in the oral and written language, to acquaint them with Hispanic culture, and to develop their skill in the linguistic analysis of Spanish. (For the major in Spanish literature see the description under Romance Studies.)

Satisfactory completion of the major should enable students to meet language requirements for teaching, to continue with graduate work in Spanish or other appropriate disciplines, or to satisfy standards for acceptance into the training programs of the government, social agencies, and business concerns. A Spanish major combined with another discipline may also allow a student to undertake pre-professional training for graduate study in law, medicine, business, etc. Students interested in a Spanish major are encouraged to seek faculty advice as early as possible. For acceptance into the major, students should consult the director of undergraduate studies of the Department of Modern Languages and Linguistics, Professor Suñer (218 Morrill Hall), who will admit them to the major.

## The Core

All majors will work out a plan of study in consultation with their advisers. Previous training and interests as well as vocational goals are taken into account when the student's program of courses is determined. Spanish 201 and 204 or 212 (or equivalent) are prerequisite to entering the major in Spanish. All majors normally include the following core courses in their programs:

1) Spanish 315-316-317

2) Spanish 311 and 312 (or equivalent)

Spanish majors have great flexibility in devising their programs of study and areas of concentration.

## The Linguistic Option

Spanish linguistics, for which the program normally includes 366, 401, 407, 408, and at least 8 additional credits in general or Spanish linguistics. (Linguistics 101-102 are recommended before entering this program.)

The J. G. White Prize and Scholarships are available annually to students who achieve excellence in Spanish.

## Study Abroad in Spain

Cornell and the University of Michigan cosponsor an academic year in Spain program. Students enrolled in this program spend the first four weeks before the fall semester begins in a residential college located on the campus of the University of Madrid, where they take a course in Spanish language and contemporary society and take advantage of special lectures and field trips to Madrid and Castile. This course carries three credits. In early October the program moves to Seville, where students enroll in as many regular classes at the University of Seville as their language competency and general education permit. Their academic work is supplemented by courses designed explicitly for the program by Seville faculty, as well as a seminar regularly offered by the resident director, who is chosen from the faculty of either Cornell or Michigan. The special courses normally include history of art and architecture, Spanish composition and syntax, and modern Spanish history. In Seville students live with selected families or in a few cases in colegios mayores. Cornell-Michigan also maintains a center in Seville, which is used by students for special seminars, tutorials, lectures, and informal gatherings.

Applicants are expected to have at least completed Spanish 204 prior to departure. Students are strongly encouraged to study abroad for the entire year rather than for one semester. Students interested in the study abroad program should consult with the Cornell Abroad office for further information (474 Uris Hall, 255-6224).

**Honors.** Honors in Spanish may be achieved by superior students who want to undertake guided independent reading and research in an area of their choice. Students in the senior year select a member of the Spanish faculty from either the Department of Romance Studies or the Department of Modern Languages and Linguistics to supervise their work and direct the writing of their honors essays (see Spanish 429-430).

**Fees.** Depending on the course, a small fee may be charged for copies of course work.

### 101 Basic Course I

Summer only. 6 credits.

M-F 8-12. Staff.

A thorough grounding in all language skills: listening, speaking, reading, and writing. Language practice in small groups. Lectures cover grammar, reading, and cultural information. Students who have previously studied Spanish must take the qualifying examination before registering for this course.

### 110 Basic Conversation Course

Summer only. 3-week session. 3 credits.

Limited to students who have previously studied Spanish and have a minimum CPT achievement score of 500 or permission of instructor.

M-F 9-12. One overnight field trip.

Z. Iguina.

Intensive course designed for students who wish to improve their oral and listening skills and increase their confidence in speaking the language.

### 121 Elementary Spanish

Fall only. 4 credits. Special sections of this course are available for students with qualification in another language. Intended for beginners or students placed by examination.

Lec, F 10:10, 11:15 or 1:25; Secs, M-R 8, 9:05, 10:10, 11:15, 12:20, 1:25, 2:30 or 3:35. Evening prelims: 7:30 p.m. Oct. 25. Z. Iguina.

A thorough grounding is given in all language skills: listening, speaking, reading, and writing. Language practice is in small groups. Lecture covers grammar, reading, and cultural information.

### 122 Elementary Spanish

Fall or spring. 4 credits. Prerequisite: Spanish 121 or CPT score between 370 and 440.

Students who obtain a CPT achievement score of 560 after Spanish 122 attain qualification and may enter the 200-level sequence; otherwise Spanish 123 is required for qualification. Evening prelims: Fall: 7:30 p.m. Oct. 25; Spring: 7:30 p.m. March 5, April 25.

Fall: Lec, R 2:30; Sec, M T W R 9:05, 10:10, 11:15, 12:20, or 1:25. M. Rice. Spring: Lec, F 10:10, 11:15 or 1:25; Secs, M-R 8, 9:05, 10:10, 11:15, 12:20, 1:25, 2:30 or 3:35. Z. Iguina.

A thorough grounding is given in all language skills: listening, speaking, reading, and writing. Language practice is in small groups. Lecture covers grammar, reading, and cultural information.

### 123 Continuing Spanish

Fall, spring, or summer. 4 credits. Limited to students who have previously studied Spanish and have a CPT achievement score between 450 and 559. Satisfactory completion of Spanish 123 fulfills the qualification portion of the language requirement.

Fall: lec, M 11:15, 1:25 or 2:30; drills, T-F 8, 9:05, 10:10, 11:15, 12:20, 1:25, or 2:30. Spring: lec, M 11:15 or 1:25; drills, T-F 8, 9:05, 10:10, 11:15, 12:20 or 1:25. Evening prelims: fall, 7:30 p.m., Oct. 16; spring, 7:30 p.m., Feb. 26, April 18. J. Routier-Pucci.

An all-skills course designed to prepare students for study at the 200-level.

### 203 Intermediate Composition and Conversation

Fall, spring or summer. 3 credits. Prerequisite: qualification in Spanish (Spanish 123 or CPT score 560-649).

Fall: M W F 8, 9:05, 10:10, 11:15, 12:20, 1:25, or 2:30. Spring: M W F 8, 9:05, 10:10, 11:15, 12:20, 1:25, or 2:30. E. Dozier.

Conversational grammar review with special attention to the development of accurate and idiomatic oral expression. Includes readings in contemporary Spanish prose and practice in writing.

### Hotel 267 Intermediate Spanish: Español de hotelería

Spring. 3 credits. Prerequisite: Spanish 123 or CPT 560 min. Hotel School elective.

M W F 12:20. E. Dozier.

An intermediate-level Spanish language course designed for students interested in improving their proficiency in the language within the specific thematic context of the hospitality and restaurant industries. The course provides a solid background of essential vocabulary, practice of all skills, and cultural background of the hispanic world.

### 204 Intermediate Composition and Conversation

Fall or spring. 3 credits. Prerequisite: Spanish 203 or permission of instructor.

Fall: M W F 9:05 (204.1: for bilinguals only), 12:20, or 1:25. Spring: M W F 8, 9:05, 10:10, 11:15, 12:20, or 1:25. Staff.

Practice in conversation with emphasis on improving oral and written command of Spanish. Includes treatment of specific problems in grammar, expository writing, and readings in contemporary prose.

### 213 Intermediate Spanish for the Medical and Health Professions

Fall or Spring. 3 credits. Prerequisite: qualification in Spanish (Spanish 123 or CPT score 560-649), or permission of instructor.

Fall: M W F 9:05; Spring: M W F 1:25. A. Tió.

Conversational grammar review, with dialogues, debates, compositions and readings on health-related themes. Fulfills proficiency requirement.

### 310 Advanced Conversation and Pronunciation

Spring. 2 credits. Prerequisite: Spanish 204 or equivalent.

M W F 9:05. Z. Iguina.

A conversation course with intensive oral practice obtained through the production of video programs. Study of the fundamental aspects of communication in the standard spoken and written Spanish, with some focus on dialectal variations. Weekly phonetics labs to improve pronunciation.

### [366 Spanish in the United States (also Linguistics 366)]

Fall. 4 credits. Prerequisite: some knowledge of Spanish. Offered alternate years. Counts toward the social science distribution requirement. Not offered 1990-91.

Hours to be arranged. M. Suñer.

Examination of major Spanish dialects in the United States from a linguistic perspective. Contrast with the standard language. Borrowing, interference, and code switching. Syntactic, morphological, and phonological characteristics. Sex-related phenomena.

### [401 History of the Spanish Language

Spring. 4 credits. Prerequisite: Linguistics 101 and qualification in Spanish, or permission of the instructor. Not offered 1990-91.

M W F 11:15. Staff.

A historical analysis of the phonology, morphology, syntax, and lexicon of the Spanish language up to the seventeenth century. Selected medieval documents are read and discussed.]

### 407 Applied Linguistics: Spanish

Fall. 4 credits. Prerequisites: qualification in Spanish, or permission of instructor.

M 9:05, F 9:05-11:00. M. Suñer.

Designed to equip the student or future teacher of Spanish with insights into problem areas for second-language learners by using linguistic descriptions.

### [408 The Grammatical Structure of Spanish

Spring. 4 credits. Prerequisites: proficiency in Spanish and Linguistics 101 or permission of instructor. Not offered 1990-91.

Hours to be arranged. Staff.

Survey of the salient morphological and syntactic characteristics of contemporary Spanish.]

### 601 Hispanic Dialectology

Fall, according to demand. 4 credits.

Hours to be arranged. Staff.

Survey of dialects of Latin America and the Caribbean.

### 602 Linguistic Structure of Ibero-Romance

Fall or spring, according to demand. 4 credits.

Hours to be arranged. Staff.

Phonological, morphological, and syntactic characteristics of the Romance languages (Catalan, Galician, Portuguese, Sephardic) and of the main dialects of the Iberian Peninsula, studied in relation to each other and to Castilian Spanish.

### [604 Contemporary Theories of Spanish Grammar

Fall or spring, according to demand. 4 credits.

Hours to be arranged. Staff.

Selected readings of contemporary Spanish linguists who exemplify different theoretical points of view.]

### 700 Seminar in Spanish Linguistics

Fall or spring, according to demand. Variable credit.

Hours to be arranged. Staff.

Topics in synchronic and diachronic Spanish linguistics.

### Swahili

See listings under Africana Studies and Research Center.



## Swedish

### 121-122 Elementary Course

121, fall; 122, spring. 4 credits each term.  
Prerequisite for 122: Swedish 121 or equivalent.

M T W R 11:15. L. Trancik.

The aim of this course is to develop skills in listening, speaking, reading and writing within Sweden's cultural context.

### 123 Continuing Swedish

Fall. 4 credits. Prerequisite: Swedish 122 or equivalent.

M T W R 12:20. L. Trancik.

Continues developing skills in spoken and written Swedish within Sweden's cultural context.

### 203 Intermediate Swedish

Spring. 3 credits. Prerequisite: Swedish 123 or permission of instructor.

Hours to be arranged. L. Trancik.

Emphasis on development of all skills, through writing, reading and discussion of culturally significant texts. Audiovisual material will further enhance language comprehension.

## Tagalog

### 101-102 Elementary Course

101, fall; 102, spring. 6 credits each term.  
Offered according to demand. Prerequisite for Tagalog 102: Tagalog 101.

M-F 8. J. U. Wolff.

### 201-202 Intermediate Tagalog Reading

201, fall; 202, spring. 3 credits each term.  
Prerequisites: for Tagalog 201, Tagalog 102 or equivalent; for Tagalog 202, Tagalog 201 or equivalent.

Hours to be arranged. J. U. Wolff.

### 300 Linguistic Structure of Tagalog

Fall or spring. 4 credits. Prerequisite: Linguistics 101.

Hours to be arranged. J. U. Wolff.

## Tamil

### 101-102 Elementary Course

101, fall; 102, spring. 6 credits each term.  
Offered according to demand. Prerequisite for Tamil 102, Tamil 101 or equivalent. Not offered 1990-91.

Hours to be arranged. J. W. Gair.]

## Thai

### 101-102 Elementary Course

101, fall; 102, spring. 6 credits each term.  
Prerequisite for Thai 102, Thai 101 or equivalent. Intended for beginners or students placed by examination.

M-F 8-8:55. N. Jagacinski.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

### 201-202 Intermediate Thai Reading

201, fall; 202, spring. 3 credits each term.  
Prerequisites: for Thai 201, Thai 102; for Thai 202, Thai 201 or equivalent.

T R 9:05-11. N. Jagacinski.

### 203-204 Intermediate Composition and Conversation

203, fall; 204, spring. 3 credits each term.  
Prerequisites: for Thai 203, Thai 102; for Thai 204, Thai 203.

Hours to be arranged. N. Jagacinski.

### 301-302 Advanced Thai

301, fall; 302, spring. 4 credits each term.  
Prerequisite: Thai 202 or equivalent.

Hours to be arranged. N. Jagacinski.

Selected readings in Thai writings in various fields.

### 303-304 Thai Literature

303, fall; 304, spring. 4 credits each term.  
Prerequisite: Thai 302 or equivalent.

Hours to be arranged. N. Jagacinski.

Reading of significant novels, short stories, and poetry written since 1850.

### 401-402 Directed Individual Study

401, fall; 402, spring. 4 credits each term. For advanced students or students with special problems or interests. Prerequisite: permission of instructor.

Hours to be arranged. N. Jagacinski.

## Ukrainian

### [131-132 Elementary Course

131, fall; 132, spring. 3 credits each term.  
Prerequisite for Ukrainian 132, Ukrainian 131 or equivalent. Not offered 1990-91.

Hours to be arranged. E. W. Browne.]

## Vietnamese

### 101-102 Elementary Course

101, fall; 102, spring. 6 credits each term.  
Prerequisite for Vietnamese 102, Vietnamese 101 or equivalent. Intended for beginners or students placed by examination.

Hours to be arranged. G. Diffloth.

### 201-202 Intermediate Vietnamese Reading

201, fall; 202, spring. 3 credits each term.  
Prerequisites: for Vietnamese 203, Vietnamese 102; for Vietnamese 204, Vietnamese 203.

Hours to be arranged. G. Diffloth.

### 203-204 Intermediate Composition and Conversation

203, fall; 204, spring. 3 credits each term.  
Prerequisites: for Vietnamese 203, Vietnamese 102; for Vietnamese 204, Vietnamese 203.

Hours to be arranged. G. Diffloth.

### 301-302 Advanced Vietnamese

301, fall; 302, spring. 4 credits each term.  
Prerequisite: Vietnamese 202 or equivalent.

Hours to be arranged. G. Diffloth.

### 401-402 Directed Individual Study

401, fall; 402, spring. 4 credits each term.  
Prerequisite: permission of instructor.  
Intended for advanced students.

Hours to be arranged. G. Diffloth.

## Yoruba

### 121-122 Elementary Course (also Africana Studies and Research Center 131-132)

121, fall; 122, spring. 4 credits each term.  
Prerequisite for Yoruba 122, Yoruba 121 or equivalent.

Hours to be arranged. V. Carstens.

### 123-203 Continuing Course (also Africana Studies and Research Center 133-134)

123, fall; 203, spring. 4 credits each term.  
Prerequisites: for Yoruba 123, Yoruba 122 or equivalent; for Yoruba 203, Yoruba 123 or equivalent.

Hours to be arranged. V. Carstens.

## MUSIC

T. Sokol, chair; M. Hatch, director of undergraduate studies (110 Lincoln Hall, 255-5049); N. Zaslav, graduate faculty representative (113 Lincoln Hall, 255-4279); V. K. Agawu, M. Bilson, D. Borden, L. Coral, M. Gilman, R. Harris-Warrick, J. Hsu, K. Husa, S. Jeneary, J. LaBarbera, S. Monosoff, E. Murray, R. Parker, D. R. M. Paterson, D. Randel, D. Rosen, M. Scatterday, J. Shames, S. Stucky, J. Webster, S. Davenney Wyner

## Musical Performance and Concerts

Musical performance is an integral part of Cornell's cultural life and an essential part of its undergraduate academic programs in music. The department encourages music making through its offerings in individual instruction and through musical organizations and ensembles that are directed and trained by members of the faculty. Students from all colleges and departments of the university join with music majors in all of these ensembles:

Big Red Marching Band  
Cornell Symphony Orchestra  
Cornell Chamber Orchestra  
Cornell Chamber Ensemble  
Cornell Symphonic Band  
Cornell Wind Ensemble  
Small wind and brass ensembles  
Collegium Musicum  
Cornell Chorale  
Cornell Gamelan Ensemble  
Chamber music ensembles  
Cornell Chorus  
Cornell Glee Club  
Chamber Singers  
Sage Chapel Choir  
Cornell Jazz Ensembles

Information about requirements, rehearsal hours, and conditions for academic credit can be found in the following listings for the Department of Music. Announcements of auditions are posted during registration each fall term and, where appropriate, each spring term as well.

The Department of Music and the Faculty Committee on Music sponsor more than one hundred formal and informal concerts each year by Cornell's ensembles, faculty, and students and by distinguished visiting artists. A special feature is the annual Cornell Festival of Contemporary Music. The great majority of concerts are free and open to the public. Lectures and concerts are listed in special monthly posters and the usual campus media.

## Nonmajors

In addition to its performing, instructional, and concert activities, the department offers numerous courses for nonmajors, many of which carry no prerequisites and presuppose no previous formal training in music. Consult the following course listings, and for further information apply to the department office, 104 Lincoln Hall (255-4097), or to the director of undergraduate studies, Professor Martin Hatch.

## The Major

Two options are available to the student planning to major in music. Each carries the study of music to an advanced level through the integration of performance, music theory, and music history. Option I is a general course, not necessarily oriented toward eventual graduate or professional work in music. Option II is a more specialized and concentrated program, suitable for students who want to prepare for graduate or professional work in music.

All students contemplating a major in music under either option should arrange for placement examinations and advising in the department as early as possible, usually during the freshman orientation period. Information is available from the director of undergraduate studies, Professor Martin Hatch, 110 Lincoln Hall (255-5049), or from the chair, Professor Thomas Sokol, 106 Lincoln Hall (255-3671). All students are expected to have chosen an adviser from among the department faculty at the time of application for major status.

**Option I** presupposes some musical background before entering Cornell. Prerequisites for admission to the major are the satisfactory completion of Music 152, at the latest by the end of the sophomore year (the freshman year is preferable), with a final grade of C or better, including an average grade of C or better in all the musicianship components of Music 152 and failure in none of them; and the passing of a simple piano examination (details are available from the department office). Students must apply to the department for formal acceptance as a music major.

The requirements for the Bachelor of Arts degree with a major in music under Option I comprise the following:

- 1) in music theory:  
Music 251–252, 351, and 352.
- 2) in music history:  
sixteen credits in courses numbered at the 300 level or above listed under Music History. At least three of these courses must be drawn from the four-course sequence Music 381–384.
- 3) in performance:  
four semesters of participation in a musical organization or ensemble sponsored by the Department of Music.

**Option II** presupposes considerable musical study before entering Cornell. Prerequisites for admission into the Option II program are previous acceptance as an Option I major and satisfactory completion of Music 252, normally by the end of the sophomore year. Students must apply to the department for formal acceptance as an Option II major. An Option II major concentrates in one of the three areas listed below. For Option II in performance, exceptional promise must be demonstrated, in part by a successful solo recital before the end of the sophomore year.

The requirements for the Bachelor of Arts degree with a major in music under Option II are:

- 1) completion of all the requirements for Option I, except as noted below, and
- 2) in addition:
  - a) in performance:
    - (1) the requirement for four semesters of participation in a musical organization or ensemble is waived (but such majors are expected to participate actively in chamber and other ensembles sponsored by the department);
    - (2) sixteen credits in individual instruction in the student's major instrument, or voice, earned by taking Music 391–392 throughout the junior and senior years
  - b) in theory and composition or in history:
    - (1) for two of the four semesters of participation in a musical organization or ensemble, Music 462 or 463 may be substituted;
    - (2) twelve additional credits in this area of concentration at the 300 level or above, of which either four may be earned in Music 301 or 302 when taken once for four credits, or eight may be earned in Music 401–402.

**Honors.** The honors program in music is intended to provide special distinction for the department's ablest undergraduate majors. To become a candidate for honors in music, a student must be invited by the faculty at the beginning of the second semester of the junior year. As soon as possible thereafter, the student will form a committee of three or more faculty members to guide and evaluate the honors work. In the senior year the candidate will enroll in Music 401–402 with the chair of the honors committee as instructor. Candidates will be encouraged to formulate programs that allow them to demonstrate their musical and scholarly abilities, culminating in an honors thesis, composition, or recital, to be presented not later than April 1 of the senior year. A comprehensive examination administered by the honors candidate's committee will be held not later than May 1. The level of honors conferred will be based primarily on the candidate's performance in the honors program, and secondarily on the candidate's overall record in departmental courses and activities.

## Distribution Requirement

The distribution requirement in the expressive arts may be satisfied with 6 credits in music, except freshman writing seminars. A maximum of 4 credits in Music 321–322 and a maximum of 3 credits in Music 331 through 338 and 441 through 450 may be used to satisfy this requirement.

## Facilities

**Music Library.** The Music Library, in Lincoln Hall, has an excellent collection of standard research tools. Its holdings consist of approximately ninety-five thousand books, periodicals, and scores and forty thousand recordings. Particularly noteworthy are the collections of opera from all periods; twentieth-century scores and recordings; a large microfilm collection of Renaissance sources,

both theoretical and musical; and a collection of eighteenth-century chamber music. In addition, the Department of Rare Books, in Olin Library, houses a collection of early printed books on music and musical manuscripts.

**Concert Halls.** The Department of Music sponsors more than one hundred concerts annually. Cornell's principal concert halls are Bailey Hall Auditorium (about 2,000), Alice Statler Auditorium (about 900), Sage Chapel (about 800) and Barnes Hall Auditorium (about 280).

**Rehearsal Spaces.** The orchestras and bands rehearse in Bailey Hall, Barnes Hall, and Barton Hall; the Jazz Ensembles, Gamelan, and Chamber Ensembles rehearse in Lincoln Hall; and the choral ensembles are quartered in Sage Chapel. Eleven practice studios in Lincoln Hall are available for individual practice by pianists, vocalists, and instrumentalists.

Twenty-two grand pianos and eight upright or studio pianos are housed in Cornell's offices, classrooms, and rehearsal spaces. In addition, our Center for Keyboard Studies includes two concert grand pianos (Steinway and Mason & Hamlin), two eighteenth-century fortepiano replicas (copies of Johann Andreas Stein and Anton Walter), an original Broadwood grand piano from 1827, an original Graff grand piano from 1825, one Dowd and one Hubbard harpsichord, and a Challis clavichord. Barnes Hall houses a portable organ by Derwood Crocker and a self-contained tracker organ by Schlicker. A large Aeolian Skinner Organ is located in Sage Chapel and there is a Helmut Wolff tracker organ in Anabel Taylor Chapel. The music department also owns a quartet of stringed instruments in eighteenth-century proportions, with appropriate bows.

**Digital/Electronic Equipment.** A Macintosh-computer-based MIDI studio is available for independent studio work and live performance. The instruments include a Yamaha KX88 MIDI Controller Keyboard, a Yamaha TX802 FM Synthesizer, and a Casio FZ 10M Sampler. In addition, there are two MIDI work stations with additional instruments.

## Freshman Seminars

### 111 Sound, Sense, and Ideas

Fall. 3 credits. Each section limited to 17 students. No prerequisites; no previous training in music required. May not be counted for the distribution requirement in the expressive arts.

T R 10:10–11:25. R. Harris-Warrick. Ways of listening, thinking, talking, and writing about music. Non-Western and popular music are considered, as well as Western classical music. Students will be given the opportunity to write about music with which they are already familiar in addition to exploring unfamiliar works and styles.

### 112 Words and Music

Fall or spring. 3 credits. Each section limited to 17 students. No prerequisites; no previous training in music required. May not be counted for the distribution requirement in the expressive arts.

T R 8:40–9:55. D. Feurzeig. Students will think and write about songs. The focus will be on twentieth-century music, especially African-American music and its spin-offs: spirituals, blues, gospel, jazz, R&B, rock, protest music, and pop. Other topics may

include traditional West African music and newer styles such as zydeco and rap.

### 113 Music since 1965

Spring. 3 credits. Each section limited to 17 students. No prerequisites; no previous training in music required. May not be counted for the distribution requirement in the expressive arts.

M W F 10:10–11. S. Taylor.

Readings will focus on music composed within the last twenty-five years—popular, jazz, film and concert music—as well as the growing influence of world musics in the West. Additional assignments will include listening to recordings and attending concerts. Students will be given the opportunity to present and write about music with which they are already familiar.

## Introductory Courses

### [101 The Art of Music

Fall. 3 credits. Not offered 1990–91.

T R 11:15–12:05; 1-hour disc to be arranged. Staff.

Explorations designed to speed up the continuing, unending development of various independent tastes. Each student chooses individually what to study from diverse styles of music and how far to study at least two contrasting styles through recordings, through singing and playing, through reading and writing; instructors help refine these choices through the term. Everyone studies a few assigned works to facilitate exchanging ideas with concrete references: in 1989 these are the 48 Preludes and some of the Fugues from Bach's Well-Tempered Clavier. Other things—from Vedic chant to songs of Bobby McFerrin—can be related to Bach with respect to qualities of sound, intervals of pitch, timing, and functional contexts. Orchestral and vocal works of Bach make likely optional contexts for the keyboard pieces that constitute the common center.]

### 103 Introduction to the Musics of the World

Fall. 3 credits. No previous training in music required.

T R 11:15–12:05; 1-hour disc to be arranged. M. Hatch.

A survey of folk, popular, and art music in several regions of the world. Topics include pitch, scale, rhythm, meter, timbre, and form in instrumental and vocal music. Recordings are the main material for study; labs present opportunities to begin performance on instruments from the regions covered.

### 105–106 Introduction to Music Theory

105, fall, spring, or summer; 106, spring. 3 credits each term. Some familiarity with music is desirable. Prerequisite for Music 106: 105 with grade of B– or better. Music 106 is limited to 50 students.

Fall or spring: M W 9:05–10:10 plus 2 hrs to be arranged. Spring: M W F 9:05 plus 1 hr to be arranged. D. Randel, 105 fall; M. Scatterday, 105 spring. D. R. M. Paterson, 106 spring.

An elementary, self-contained introduction to music theory emphasizing fundamental musical techniques, theoretical concepts, and their application. Music 105: notation, pitch, meter; intervals, scales, triads; basic concepts of tonality; extensive listening to music in various styles; analysis of representative works of Bach, Mozart, Beethoven, and Debussy. Music 106: systematic introduction to writing tonal harmony and melody; ear training.

### 108 Bach to Debussy

Spring. 3 credits. Prerequisite: Music 105 or permission of instructor.

M W 10:10–11; 1-hour disc to be arranged. R. Harris-Warrick.

A chronological survey of major works in the Western concert repertoire in all genres, from works of Bach and Handel that embody the newly consolidated language of tonality to works of Mahler and Debussy that signal the beginning of new strategies for many composers of the twentieth century.

### 120 Learning Music through Digital Technology

Fall or spring. 3 credits. Enrollment limited. Prerequisite: permission of instructor.

Fall: T R 1:25–2:40 or M W F 2:30–3:20; spring: M W F 2:30–3:20. D. Borden.

This course uses selected commercially available technological resources to produce live music. The student is expected to master the Macintosh computer, several music software programs, and several synthesizers using MIDI. Each student must learn to read music if he or she has not already done so. The course will also cover the rudimentary procedures for making a good-quality tape recording. The final is a live concert presentation of the student's final project.

### 173 Music and Poetry from Dowland to Dylan

Fall. 3 credits.

M W F 1:25–2:15. R. Parker

The course will consider a broad range of musical responses to poetry, with examples from each of the last four centuries. There will be an emphasis on class discussion and encouragement of live performances within class.

## Music Theory

### 151–152 Elementary Tonal Theory

151, fall; 152, spring. 5 credits each term.

Prerequisite for Music 151: knowledge of the rudiments of music and some ability to perform demonstrated through proficiency tests given on the first two days of the term (registration is provisional, contingent on passing this test). Prerequisite for Music 152: 151 or equivalent. Intended for students expecting to major in music and other qualified students. Required for admission to the music major. All students intending to major in music, especially those intending to elect Option II should if possible enroll in Music 151–152 during the freshman year.

M W F 11:15–12:05; 2 discs to be arranged. E. Murray and staff.

Detailed study of the fundamental elements of tonal music; rhythm, scales, intervals, triads; melodic movement, two-part counterpoint, harmonic progression in the chorale style of J. S. Bach; and introduction to analysis of small forms. Drill in aural discrimination, sight singing, keyboard harmony, and elementary figured bass; rhythmic, melodic, and harmonic dictation; and score reading.

### 220 Learning Counterpoint through Digital Technology

Spring. 3 credits. Enrollment limited.

Prerequisite: 151/152 and/or permission of instructor.

T R 1:25–2:40. D. Borden.

This course is a study of traditional contrapuntal techniques from the fourteenth century to the present, with emphasis on the structures used by J. S. Bach. Synthesizers, samplers, MIDI, and music software will be covered.

### 245–246 Introduction to the Gamelan

245, fall; 246, spring. 1 credit each term. 2 credits with permission of instructor. No previous knowledge of musical notation or performance experience necessary. Music 245 is not a prerequisite to 246.

M W 1:25–2:15; 2:30–3:20 or

T R 3:35–4:25. M. Hatch and staff.

Concentrated instruction in the repertoires and practices of Indonesian gamelan traditions. Related aspects of culture—drama, dance, literature, and oral poetry—will be studied in their influence on musical practices. This sequence concentrates on instruction in elementary techniques of performance on the gamelan. Music 245–246 is a course for beginners in gamelan that covers only instruction in elementary gamelan performance techniques.

### 251–252 Intermediate Tonal Theory

251, fall; 252, spring. 5 credits each term.

Prerequisite for Music 251: 152 or the equivalent or a suitable level of performance on a proficiency test given by the department during orientation each fall term. Prerequisite for Music 252: 251.

M W F 10:10; 2 discs to be arranged.

J. Webster, fall; D. R. M. Paterson, spring.

Continuation of the study of harmony by composition and analysis, including seventh chords, secondary dominants, and chromatic harmony. Students are expected to write several short pieces in eighteenth- and nineteenth-century styles and forms, such as two-part inventions and minuets scored for string quartet. Continuation of analysis of forms, with emphasis on large forms, e.g., sonata form. Ear training, keyboard harmony, figured bass, sight singing, dictation, and score reading.

### 351 Advanced Tonal Theory

Fall. 4 credits. Prerequisite: Music 252 or permission of instructor.

M W F 11:15. R. Parker.

Inventions, chromatic harmony, analysis of larger forms and nineteenth-century music, ear training, score reading, and advanced keyboard studies, including figured bass. Students probe questions about the meaning of "theory" and "analysis" in music and in other realms of study. They question and refine their own usages of the word "tonal" in relation to older and newer music, while returning often to short pieces of Chopin with which to consider applications of tonal theory in practice.

### 352 Materials of Twentieth-Century Music

Spring. 4 credits. Prerequisite: Music 351.

M W F 11:15. J. Webster.

Introduction to some techniques of composers from 1900 to 1950, including expanded tonal resources, atonality, and new approaches to form and rhythm. Analysis of representative smaller works by Bartok, Hindemith, Schoenberg, Stravinsky, Webern, and some American composers. Writing assignments in various styles.

### [456 Orchestration

Fall. 4 credits. Prerequisite: Music 252 or permission of instructor. Not offered 1990–91.

T 10:10–12:05. K. Husa.

A study of the instruments of the orchestra and their use in representative works from 1700 to the present. Scoring for various instrumental groups, including large orchestra. Students will occasionally attend rehearsals of Cornell musical organizations and ensembles.]

**462 Orchestral Conducting**

Spring. 2 credits. Prerequisite: Music 352.  
T 10:10-12:05. K. Husa.

The fundamentals of score reading and conducting technique; study of orchestral scores from baroque, classical, romantic, and contemporary periods. Occasionally the class will visit rehearsals of Cornell musical organizations.

**463 Choral Conducting**

Fall. 2 credits. Prerequisite: Music 252 or permission of instructor.

F 1:25-2:40. T. Sokol.

**Music History****[217 The Organ and Its Literature]**

Fall. 3 credits. Prerequisite: Music 105 or permission of instructor. Not offered 1990-91.

M W F 11:15. D. R. M. Paterson.

An analytical survey of the history of the organ, including its design and construction and its most significant repertoire.]

**[222 Topics in Jazz History]**

Spring. 3 credits. Enrollment limited.  
Prerequisite: permission of instructor. Not offered 1990-91.

TR 11:15; one disc to be arranged.  
M. Hatch.

Lectures will introduce various jazz styles and techniques from around 1900 to the 1970s. Sections will present progressive exercises in analysis of fundamental aspects of jazz, including rhythm, meter, melody, harmony, timbre, and form. Focus: the recorded anthology Smithsonian Collection of Classical Jazz.]

**[271 Monteverdi and the Birth of the Baroque]**

Fall. 3 credits. Prerequisite: any three-credit music course or permission of instructor.

M W 10:10. N. Zaslaw.

Using as its focal point the career and music of Claudio Monteverdi (1567-1643), the course will examine the changes music underwent between the second half of the 16th century and the first half of the next century. Monteverdi's operas *Orpheus* and *The Coronation of Poppea* as well as representative canzonettas, madrigals, and church works will be studied alongside works of his contemporaries. Attention will also be paid to the social, political, and cultural contexts of the music discussed.]

**[272 Music and the Dance (also Theatre Arts 272)]**

Spring. 3 credits. Prerequisite: any three-credit music course or permission of instructor. Not offered 1990-91.

T R 9:05. R. Harris-Warrick.

This course will explore selected topics in the interrelations between music and dance in the Western tradition. Some of the areas to be examined include the influence of dance movement on musical composition, composer-choreographer relationships, and a comparison of music composed for dancing with dance music composed for listening. Examples will be drawn from the Renaissance, the baroque period, and the modern era. Students will be asked to pursue an independent project.]

**274 Opera**

Spring. 3 credits.

M W F 12:20-1:10. D. Rosen

An introduction to major works of the operatic repertory, with discussion of texts and theatrical performances as well as music.

Video recordings will be an integral part of the course; optional trips to live performances will be scheduled where possible.

**[275 The Choral Tradition]**

Spring. 3 credits. Prerequisite: any three-credit music course or permission of instructor. Not offered 1990-91.

M W F 10:10. R. Harris-Warrick.

A survey of representative works, both sacred and secular, in the Western choral tradition from the Middle Ages to the twentieth century. Class will include discussion of performances as well as historical and stylistic issues, and will be integrated with local concert offerings whenever possible.]

**[277 Baroque Instrumental Music]**

Spring. 3 credits. Prerequisite: any three-credit music course or permission of instructor. Not offered 1990-91.

M W F 12:20. N. Zaslaw.

Topics covered will include the rise of purely instrumental music; Renaissance string bands; the English virginalists and viol consorts; the Italian violin school; the German organ school; lute and guitar music; the invention of the baroque winds, orchestra, and fortepiano; and the sonatas, concertos, and suites of Bach, Corelli, Couperin, Handel, Purcell, Rameau, Telemann, and Vivaldi.]

**281 Music of the Baroque Period**

Fall. 3 credits. Prerequisite: ability to read music.

T R 1:25-2:40. J. Hsu.

A study of selected instrumental works by J. S. Bach and other composers of the seventeenth and eighteenth centuries, illustrating the different traditions of the various genres and the confluence of the different national styles of the period.

**[282 Music of the Classical Period]**

3 credits. Prerequisite: any three-credit music course or permission of instructor. Not offered 1990-91.

M W 1:25. J. Webster.]

**[283 Music of the Romantic Era]**

3 credits. Prerequisite: any three-credit music course or permission of instructor. Not offered 1990-91.]

**[285 Music in the Middle Ages]**

Fall. 3 credits. Prerequisite: any three-credit music course or permission of instructor. Not offered 1990-91.

M W F 10:10. D. Randel.]

**[286 Music in the Renaissance]**

Spring. 3 credits. Prerequisite: any three-credit music course or permission of instructor. Not offered 1990-91.

M W F 10:10. D. Randel.]

**287 Mozart**

Fall. Prerequisite: any three-credit music course or permission of instructor. 3 credits.

T R 2:55-4:10. N. Zaslaw.

A chronological tour of the life and works of Wolfgang Amadeus Mozart by means of original documents, scores, recordings, and live performances. As a postlude, an evaluation of Peter Shaffer's play and movie *Amadeus* will be undertaken.

**[374 Music and Drama]**

Fall. 4 credits. Prerequisite: any three-credit music course or proficiency in German or Italian. Not offered 1990-91.

T 1:25-4:25. A. Groos, R. Parker.

A team-taught study of major works of the German and Italian repertory between 1780 and 1920. Among the issues to be considered will be source-libretto and words-music relationships, reception, and criticism. Works to be studied will include operas by Mozart, Verdi, Wagner, Puccini, and Strauss.]

**[379 The Study of Non-Western Musics]**

4 credits. Prerequisite: any three-credit music course or permission of instructor. Not offered 1990-91.

Staff.]

**Music History Seminars for Majors and Qualified Non-Majors**

Prerequisite: Music 152 or permission of instructor. Intended primarily for music majors, these seminars will investigate selected topics and repertoires from each period in some detail. Each seminar will include listenings, readings, oral and written papers, and analyses.

**[381 Music in Western Europe to 1700]**

Fall. 4 credits. Not offered 1990-91.

T R 8:40. R. Harris-Warrick.]

**[382 Music of the Eighteenth Century]**

Spring. 4 credits. Not offered 1990-91.

T R 8:40. J. Webster.]

**383 Music of the Nineteenth Century**

Fall. 4 credits.

T R 8:40-9:55. D. Rosen.

**384 Music of the Twentieth Century**

Spring. 4 credits.

T R 10:10-11:25. S. Stucky.

**398-399 Independent Study in Music History**

398, fall; 399, spring. 4 credits. Prerequisite: Music 152 and permission of instructor.

Staff.

Advanced study of various topics in music history. Students enrolling in Music 398-399 participate in, but do not register for, an approved 200-level music history course and, in addition, pursue independent research and writing projects.

**412 The Good and the Bad in Popular Culture (also Society for the Humanities 412)**

Spring. 3 credits. No prerequisite. Limited enrollment.

R 2:30-4:30. S. Frith.

Academic accounts of popular culture tend to treat the question of value in very general terms. Either mass-produced art is taken to be worthless by definition (e.g., Adorno, Bloom) or else the popular and the valuable are simply equated (e.g., Kiske). The purpose of this course is to examine the quality of popular culture more rigorously, and I will be less interested in the familiar critical commentaries than in investigating the ways in which value judgments work in the actual production and consumption of popular music, television, film, fiction, etc.



**413 American Music (also Society for the Humanities 413)**

Fall. 3 credits. No prerequisite. Limited enrollment.

R 2:30-4:30. T. Ross.

A study of several traditions in America's musical fabric, such as jazz, shape-note singing, zydeco, salsa, symphonic and experimental music, rock 'n' roll, and one-man bands. How are these defined, and what mutual influences can be observed both near at hand and globally? Diverse musical ethnicities are examined through lecture, field-tapes (video and audio), reading, and some in-class performance.

**Independent Study****301-302 Independent Study in Music**

301, fall; 302, spring. Credit to be arranged.

Prerequisite: departmental approval.

Presupposes experience in the proposed area of study.

Hours to be arranged. Staff.

**Honors Program****401-402 Honors in Music**

401, fall; 402, spring. 4 credits each term.

Limited to honors candidates in their senior year.

Staff.

**Musical Performance****321-322 Individual Instruction in Voice, Organ, Harpsichord, Piano, Strings, Woodwinds, and Brass**

The number of places is strictly limited.

Prerequisite: successful audition with the instructor. Students may register only with the prior permission of the instructor. Students may register for this course in successive years. For information, consult the music department office, Lincoln Hall.

Students may sign up for individual instruction in music performance, *with permission of the instructor only*, following a successful audition; usually scheduled during the first week of classes. Lessons without credit (Music 321-322): The fee for one half-hour lesson weekly, *without credit* during the term is \$90. For a one-hour lesson or two half-hour lessons *without credit* the fee is \$180. Practice-room fees for six hours weekly are \$30 per term for a room with a piano; \$10 for a room without a piano; \$50 for use of a pipe organ.

*Lessons for credit* (Music 321-322): Advanced students, at the sole discretion of the instructor, may earn 2 credits each term for a one-hour lesson (or two half-hour lessons) weekly accompanied by an appropriate practice schedule. For every 4 credits earned in Music 321-322, the student must have earned, or currently be earning, at least 3 credits in music courses (not including Freshman Seminars, Music 321-322, 331 through 338, 391-392, or 441 through 450); these 3 credits must be earned prior to, or simultaneously with, the first 2 credits in 321-322. The fee for a one-hour lesson (or two half-hour lessons) weekly, *for credit*, during the term is \$135. Practice-room fees for twelve hours weekly are \$40 *per term* for a room with a piano; \$20 for a room without a piano; \$75 for use of a pipe organ.

Fees are non-refundable once lessons begin, *even if the course is subsequently dropped*.

Music majors receive a scholarship equal to the lesson fee listed above. Members of department-sponsored performance ensembles and organizations may, with permission of the director of the organization, receive a scholarship of up to one-half the Cornell fee for the type of lessons chosen during the term. (These scholarships are intended for lessons in the student's primary performing medium.)

Under certain conditions students may earn credit for lessons taken outside Cornell (Music 321h-322h). Arrangements must be made through the Department of Music office. Lesson-fee scholarships apply, when awarded, in the same dollar amounts as those for lessons taken at Cornell.

**321a-322a Individual Instruction in Voice**

321a, fall; 322a, spring. 2 credits each term.

Hours to be arranged.

S. Davenney Wyner.

The Vocal Coaching Program (non-credit) is administered through individual choral ensembles, coordinated by Ms. Hanson.

**321b-322b Individual Instruction in Organ**

321b, fall; 322b, spring. 2 credits each term.

Hours to be arranged. D. R. M. Paterson.

**321c-322c Individual Instruction in Piano**

321c fall; 322c, spring. 1-2 credits each term.

Hours to be arranged. M. Bilson,

J. Shames, and staff.

**[321d-322d Individual Instruction in Harpsichord**

321d, fall; 322d, spring. 2 credits each term.

Not offered 1990-91.

Hours to be arranged. Staff.]

**321e-322e Individual Instruction in Violin or Viola**

321e, fall; 322e, spring. 2 credits each term.

Hours to be arranged. S. Monosoff.

**321f-322f Individual Instruction in Cello or Viola da Gamba**

321f, fall; 322f, spring. 2 credits each term.

Hours to be arranged. J. Hsu.

**321g-322g Individual Instruction in Brass**

321g fall; 322g, spring. 2 credits each term.

Hours to be arranged. M. Scatterday.

**321h-322h Individual Instruction outside Cornell**

321h, fall; 322h, spring. 2 credits each term.

Staff sponsored.

All the standard orchestral and band instruments and guitar may, under certain conditions, be studied for credit with outside teachers. This course is available primarily for the study of instruments not taught at Cornell and for the use of those who for reasons of space cannot be admitted to Music 321a-g or 322a-g. Prior approval by a member of the faculty in the department is required. For information and a list of approved teachers, consult the department office, 104 Lincoln Hall.

**391-392 Advanced Individual Instruction**

391, fall; 392, spring. 4 credits each term.

Open only to juniors and seniors majoring in music under Option II with concentration in performance and to graduate students. Option II majors whose lessons must be taken outside Cornell may apply to the department for financial assistance toward the cost of lessons; \$135 per semester will normally be awarded to

such students and a larger amount may be awarded under certain circumstances. Music 391 is not a prerequisite to 392.

Hours to be arranged. Staff.

**Musical Organizations and Ensembles**

Students may participate in musical organizations and ensembles throughout the year.

Permission of the instructor is required, and admission is by audition only, except that the Sage Chapel Choir and the Cornell Gamelan Ensemble are open to all students without prior audition. Registration is permitted in two of these courses simultaneously and students may register in successive years, but no student may earn more than 6 credits in these courses.

Membership in these musical organizations and ensembles is also open to qualified students who wish to participate without earning credit.

**331-332 Sage Chapel Choir**

331, fall or summer; 332, spring. 1 credit. No audition for admission.

M 7-8:30 p.m., R 7-8:30 p.m., Sunday 9:30 a.m. D. R. M. Paterson.

**333-334 Cornell Chorus or Glee Club**

333, fall; 334, spring. 1 credit. Prerequisite: permission of instructor.

Chorus: T 7:15-9:15 p.m., plus 2 hours to be arranged. Glee Club: W 7:15-9:15 p.m., plus 2 hours to be arranged. S. Davenney Wyner or T. Sokol.

**335-336 Cornell Orchestra**

335, fall; 336, spring. 1 credit. Prerequisite: permission of instructor.

Rehearsals for the Cornell Symphony Orchestra: W 7:30-10 p.m. E. Murray.

**337-338 University Bands**

337, fall; 338, spring. 1 credit.

Symphonic band: fall or spring, T and W 4:45-6. Wind ensemble: spring, M 7:30-9:30 p.m. and R 4:45-6. M. Scatterday.

Students interested in participating in the Big Red Marching Band should consult Mr. Jeneary. For information about the Jazz Ensembles, please speak with Mr. LaBarbera.

**421-422 Cornell Chamber Ensemble**

1 credit. Prerequisite: permission of instructor.

R 5-6:30. J. Hsu.

Study and performance of the chamber symphonies of Haydn, Mozart, and their contemporaries. For strings, woodwinds, and horns.

**437/438 Chamber Winds**

437, fall. 438, spring. 1 credit each term.

Prerequisite: permission of instructor.

R 4:45-6. M. Scatterday.

A flexible instrumentation ensemble performing original woodwind, brass, and percussion music from Gabrieli brass choirs and Mozart serenades through more contemporary works such as Stravinsky's Octet or *L'Histoire Du Soldat*. The ensemble will perform on symphonic band and wind ensemble concerts in addition to several chamber concerts throughout the year.

**441-442 Chamber Music Ensemble**

441, fall; 442, spring. 1 credit. Prerequisite: permission of instructor.

J. Hsu, fall; S. Monosoff, spring.

Study and performance of chamber music literature: strings, winds, piano; duos, trios, quartets, etc. Emphasis on interpretation.

**443-444 Chorale**

Fall or spring. 1 credit each term. Prerequisite: permission of instructor.

Fall, M 4:30-6:30. S. Davenney Wyner.  
Spring, F 4:30-6:15. T. Sokol.

Study and performance of selected choral music.

**445-446 Cornell Gamelan Ensemble**

445, fall; 446, spring. 1 credit each term.  
R 7:30-10 p.m. M. Hatch and staff.

Advanced performance on the central Javanese gamelan. Tape recordings of gamelan and elementary cypher notation are provided. Some instruction by Indonesian musicians is offered in most years.

**447-448 Collegium Musicum**

1 credit. Prerequisite: permission of instructor.  
T 5-6:30. J. Hsu.

Study and performance of Renaissance and Baroque instrumental music. For string and wind instruments.

**Graduate Courses**

Open to qualified undergraduates with permission of instructor.

**601 Introduction to Bibliography and Research**

Fall. 4 credits.

M 1:30-4:25. L. Coral.

This course explores the nature of the discipline and introduces the many types of bibliographic tools needed to pursue research in music.

**[602 Analytical Technique**

Fall. 4 credits. Not offered 1990-91.

M 1:25-4. J. Webster.

A critical survey of various analytical methods in current use. Frequent analytical assignments and class presentations.]

**[603 Editorial Practice**

Spring. 4 credits. Not offered 1990-91.

F 10:10-12:05. R. Harris-Warrick.

Fundamental techniques of source study and filiation, the nature of a musical text, and the editorial process. Opportunity to make a critical edition based on original sources.]

**[604 Ethnomusicology: Areas of Study and Methods of Analysis**

Spring. 4 credits. Not offered 1990-91. Open

to graduate students in anthropology, linguistics, psychology, sociology, and other cognate fields with permission of instructor. Major aspects of research into musical cultures of the world. Problems, theories, and methods, especially those affecting analytical terminology, transcription and analysis of sound events, and fieldwork.]

**[622 Historical Performance Practicum**

Spring. 4 credits. Not offered 1990-91.

R 2:30-4:25. N. Zaslaw, M. Bilson.

The study of eighteenth-century instrumental manuals and its application to modern performance.]

**[653 Topics in Tonal Theory and Analysis**

Fall. 4 credits. Not offered 1990-91.

R 1:30-4:25. V. K. Agawu.]

**[654 Topics in Post-tonal Theory and Analysis**

Spring. 4 credits. Not offered 1990-91.

M 1:25-4:30. E. Murray.

Various approaches to the post-tonal repertory will be explored, including set theory, voice leading, and rhythmic factors. Music studied will include works by Berg, Webern, Stravinsky, Dallapiccola, Boulez, and others.]

**[656 Modern Orchestration**

Fall. 4 credits. Not offered 1990-91.

T 10:10-12:05. K. Husa.]

**657-658 Composition**

657, fall; 658, spring. 4 credits each term.

W 1:25-4:30. S. Stucky.

**659-660 Composition**

[659, fall;] 660, spring. 4 credits each term.

T 2:30-4:25. K. Husa. 659 not offered fall 1990.

**662 Orchestral Conducting**

Spring. 4 credits.

T 10:10-12:05. K. Husa.

**669-[670] Debussy to the Present**

669, fall; [670, spring]. 4 credits each term. 670 not offered 1990-91.

T 2:30-4:25. S. Stucky.

Topic for fall 1990: Biobibliographic, analytical, and critical approaches to the music of Witold Lutoslawski, with emphasis on the works composed since 1976 and the literature published since 1981. Comparative studies may refer to composers such as Boulez, Carter, Berio, Ligeti, and Messiaen.

**[677 Mozart: His Life, Works, and Times (also German 757)**

Fall. 4 credits. Not offered 1990-91.

T 2:30-5. N. Zaslaw.

After an introduction to the current state of Mozart studies, students will pursue individual research projects while the seminar undertakes a group investigation of the manuscript and printed sources for, and historical context of, Mozart's Symphony in D major, K. 297.]

**[680 Topics in Ethnomusicology**

Spring. 4 credits. Not offered 1990-91.

W 2:30-4:25. M. Hatch.

Advanced readings in ethnomusicology, with attention focused on a particular topic.]

**[681 Seminar in Medieval Music**

Fall. 4 credits. Not offered 1990-91.

D. Randel.]

**[683]-684 Seminar in Renaissance Music**

[683, fall;] 684, spring. 4 credits each term. 683 not offered 1990-91.

W 1:25-4:25. D. Randel.

Topic for spring 1991: The French chanson from Dufay to Josquin.

**686 Seminar in Baroque Music**

Fall. 4 credits.

W 1:25-4:25. N. Zaslaw.

An investigation of the music of the German and Austrian followers of Jean-Baptiste Lully in the period c. 1675-1710. Issues of transmission, style, performance practice, and cultural context will be addressed.

**687 Seminar in Classical Music**

Spring. 4 credits.

M 1:25-4. L. Coral.

Based on auction records, publishers catalogues, and other documents, this seminar will explore the dissemination of music in the second half of the eighteenth century.

**[688 Seminar in Classical Music**

Spring. 4 credits. Not offered 1990-91.

R 1:30-4:25. J. Webster.]

**[689]-690 Seminar in Music of the Romantic Era**

Spring. 4 credits. 689 not offered 1990-91.

R 1:25-4:25. J. Webster.

Topics in nineteenth-century instrumental music.

**[691-692 Performance Practice**

691, fall; 692, spring. 4 credits each term. Not offered 1990-91.

W 2:30. N. Zaslaw.

The rise of the orchestra in the late seventeenth and early eighteenth centuries.]

**697-698 Independent Study and Research**

697, fall; 698, spring. Credit to be arranged. Hours to be arranged. Staff.

**[699 Musical Notation**

Fall. 4 credits. Not offered 1990-91.

N. Zaslaw, K. Husa, J. Hsu, M. Hatch.]

**[785-786 History of Music Theory**

785, fall; 786, spring. 4 credits each term. Not offered 1990-91.

J. Webster.]

**[788 History and Criticism**

Spring. 4 credits. Not offered 1990-91.

T 2:30. D. Randel.

The nature of history and criticism in musicology in the light of current thought in other disciplines such as literary criticism, history, and philosophy.]

**[789 Liturgical Chant in the West**

Fall. 4 credits. Not offered 1990-91.

F 10:10-12:05. D. Randel.

The formation of the major Western liturgical repertoires, their interrelation, and their early history.]

**NEAR EASTERN STUDIES**

R. Brann, chair; J. Katz (Mellon fellow), S. Katz, S. Mehrez (director of undergraduate studies), D. I. Owen (acting director of the Program of Jewish Studies), L. Peirce, D. Powers (graduate faculty representative and chair of the Committee for Arabic and Islamic Studies), G. Rendsburg, N. Scharf, M. Winter, M. Younes. Joint faculty: M. Bernal, S. Gilman, S. Telhami.

**The Department**

The Department of Near Eastern Studies (360 Rockefeller Hall, 255-6275) offers courses in the archaeology, civilization, history, languages, and literatures of the Near East. Students are encouraged to take an interdisciplinary approach to the cultures of this region that has had such an important impact on the development of our own civilization and that plays so vital a role in today's world community. The department's course offerings treat the Near East from ancient times to the modern period and emphasize methods of historical and literary analysis. Near Eastern Studies also provides the basic courses in the Program of Jewish Studies and serves as the home of the Faculty Committee for Arabic and Islamic Studies.

## Distribution Requirements

Any two Near Eastern studies history or archaeology courses at the 200 or 300 level that form a reasonable sequence or combination satisfy the distribution requirement in the social sciences or history. Any two Near Eastern studies civilization or literature courses at the 200 or 300 level that form a reasonable sequence or combination satisfy the distribution requirement in the humanities. NES 197 or NES 198 plus any other Near Eastern studies course will constitute a sequence to fulfill the distribution requirement in either social sciences or humanities, depending on the second course. All 200- and 300-level language courses may fulfill the humanities requirement.

## The Major

The student who majors in Near Eastern Studies may concentrate in one of the following five areas:

1. Near Eastern languages and literatures
2. Ancient Near Eastern studies
3. Judaic studies
4. Islamic studies
5. Contemporary Near Eastern studies

The precise sequence and combination of courses chosen to fulfill the major is selected in consultation with the adviser; all majors, however, must satisfy the following requirements (S-U options not allowed):

- 1) Qualification in one of the languages offered by the department
- 2) Eight NES courses (which may include intermediate and advanced language courses), including NES 197 or NES 198
- 3) Four courses in subjects related to the student's concentration, which may, in some cases, be taken outside the department

Prospective majors should discuss their plans with the director of undergraduate studies before formally enrolling in the department. To qualify as a major, a cumulative grade average of C or better is required.

**Honors.** Candidates for the degree of Bachelor of Arts with honors in Near Eastern languages and literatures, Ancient Near Eastern studies, Judaic studies, or Islamic studies must fulfill the requirements of the appropriate major study and enroll in the honors course, NES 499, in the first semester of their senior year. For admission to the honors program, candidates must have a cumulative average of B+ or better and have demonstrated superior performance in Near Eastern studies courses. After consulting their major adviser, candidates should submit an outline of their proposed honors work to the department during the second semester of their junior year.

**Study abroad.** There are many opportunities for study in the Near East. Cornell has agreements with the American University in Cairo, Ben-Gurion University, the University of Haifa, Hebrew University, Tel Aviv University, and the Technion in Israel that will permit students to enroll for a year or in some cases for a semester. Study in regular university courses at Haifa, Hebrew University, and Tel Aviv University will be permitted for students with adequate language preparation; otherwise, students enroll in the Overseas Study Program of the institution. Except for instruction in Arabic language and literature,

courses at the American University in Cairo are taught in English. Cornell Abroad students may also have the option of undertaking independent study in the summer following their academic year abroad. Students planning to study overseas during their junior year should develop language skills during their freshman and sophomore years.

## Program of Jewish Studies

The field of Jewish studies encompasses a broad spectrum of disciplines that include civilization, language, literature, philology, and history. The Department of Near Eastern Studies offers students the opportunity to take a wide variety of courses in Jewish studies whose subjects are not represented in this department. Students interested in planning a program in Jewish studies should consult the Department of Near Eastern Studies. For complete listings and details see Program of Jewish Studies under "Special Programs and Interdisciplinary Studies."

## Committee for Arabic and Islamic Studies

The Committee for Arabic and Islamic Studies was created to promote the study at Cornell of the languages, history, culture, and politics of the Near East. Composed of members of the College of Arts and Sciences faculty representing a variety of disciplines, the committee currently sponsors the Comparative Muslim Societies Seminar, which is devoted to the interdisciplinary study of Muslim societies throughout the world. The committee also sponsors lectures and conferences on other topics related to its mandate. Students interested in pursuing Arabic and Islamic Studies should consult with the Director of Undergraduate Studies in the Department of Near Eastern Studies.

## Shiloah Program with the Dayan Center, Tel Aviv University

The Department of Near Eastern Studies has established a program with the Dayan Center for Middle Eastern and African Studies at Tel Aviv University. Since spring semester 1982, the department has had a professor visiting from the center to teach a course or courses on the modern Middle East in his or her area of specialty. Courses have included a general survey on the history of the modern Middle East and seminars on Egypt, Lebanon, Saudi Arabia, and the Arab-Israeli conflict.

## Freshman Writing Seminars

### 115 Literature and Politics in the Arab World

Fall. 3 credits.

M W F 11:15-12:05. S. Mehrez.

For the past century or so, the Middle East has provided an almost uninterrupted scene of political and ideological struggle. Revolution, nationalism, war, socialism, radicalism, and fundamentalism have all been part and parcel of the modern history of the Middle East. Where does literature fit into this picture? What is the role of the intellectual in a part of the world where writers cannot afford to sit back and poke sophisticated irony at one another or explore the anguished world of lonely individuals abstracted from time and actual circumstances. Through readings of Middle Eastern literary texts we will explore how writers have participated and continue to participate not so much in the writing of but

rather in the making of history. The emphasis of the course is on improving reading and writing skills. Students will be assigned a number of short papers at first, then longer essays toward the second half of the semester.

### 118 A Nobel Prize for the Arabs

Spring. 3 credits.

M W F 9:05-9:55. S. Mehrez.

This course will investigate the politics of the Nobel prize in general and how awarding it to Naguib Mahfouz was received in the Arab world at large, and in Egypt, in particular. Close attention will be given to the "Rushdie Affair" and how it reflected on the Nobel prize winner in Egypt. Through selected readings in Naguib Mahfouz's translated works, students will become acquainted not only with the "father of the Arabic novel," but with the development of the novel itself as a twentieth-century genre in Arabic literature as well.

### 154 Harems, Houris, and Hashish: Western Perceptions of the Middle East

Spring. 3 credits.

T R 10:10-11:25. D. Powers.

Societies acquire their identities, in part, by defining themselves in relation to foreigners, strangers, aliens, or enemies; we divide the world into the familiar (Europe, the West, "us") and the strange (the Orient, the East, "them"). In this course we will explore how contemporary Western perceptions of the Middle East have been shaped by the imperial and colonial experience of the past 150 years, paying special attention to the role of power and politics in the production of culture and knowledge.

### 161-162 Archaeology and National Identity

161, fall; 162, spring. 3 credits.

M W F 9:05-9:55. Staff.

This seminar will explore the link between archaeology and nationalism in the Middle East in the twentieth century. Emphasis will be placed on the political use of archaeology in Israel, Iraq, and Iran, although other countries will be discussed. Topics to be explored will include: a) The use of the past to legitimize current regimes; b) how the past is made to "fit" present day ideologies; c) how the understanding of the nation's past can undergo radical revision with a change of leadership (i.e., Iran's view of its pre-Islamic past under the Shah and under Komeini).

## Language Courses

### 101-102 Elementary Modern Hebrew I and II (also Jewish Studies)

101, fall; 102, spring. 6 credits each term. Prerequisite for NES 102: 101 or permission of instructor. Satisfactory completion of NES 102 fulfills the qualification portion of the language requirement. Enrollment limited to 15 students in each section.

M-F 9:05, 10:10, or 1:25. Sections I and II, S. Shoer; Section III, N. Scharf.

Intended for beginners (section I for students without any previous background). A thorough grounding is given in all the language skills, emphasizing reading, writing, grammar, listening, and speaking. (1) Oral comprehension and production: (a) in the class room—ability to understand the basic dialogues and passages without the aid of written texts, to use these texts in variation, and to create new ones; (b) in the outside world—ability to meet basic travel needs and daily routine needs, both at work and in a study situation. (2) Reading: (a) in the classroom—ability to read the texts in the lessons, as well as new texts based on materials presented in class, and to deal with extensive readings (i.e., materials based on texts presented in the classroom as well as additional contextually relevant vocabulary items); (b) in the outside world—ability to read simple road signs, train and bus schedules, menus, simple directions, etc. (3) Writing: (a) in the classroom—ability to communicate by writing short sentences and to construct short dialogues based on simple sentences or brief passages on topics included in classroom discussions; (b) in the outside world—ability to construct simple, very short letters or notes, or brief summaries or reports. (4) Culture: meet basic courtesy needs in informal situations, know basic geographic facts, and become aware of the composition of the people of the country.

### 103 Elementary Modern Hebrew (also Jewish Studies)

Summer (six-week session). 4 credits. Enrollment limited to 15 students.

M-F 8:30-9:45. N. Scharf.

The fundamentals of grammar, syntax, and vocabulary as applied to both conversational and written Hebrew in the modern idiom. Students are expected to know the Hebrew alphabet for the first session of class.

### 111-112 Elementary Arabic

111, fall; 112, spring. 6 credits each term. Prerequisite for Arabic 112: Arabic 111 or permission of instructor.

M-F 10:10-11. M. Younes.

The course provides a thorough grounding in all language skills: listening, speaking, reading, and writing. It starts with spoken Arabic and gradually integrates Modern Standard Arabic in the form of listening and reading texts. Emphasis will be on learning the language through using it in meaningful contexts. The student who successfully completes the two-semester sequence will be able to: 1) understand and actively participate in simple conversations involving basic practical and social situations (introductions, greetings, school, home and family, work, simple instructions, etc.); 2) read Arabic material of limited complexity and variety (simple narrative and descriptive texts, directions, etc.); 3) write notes and short letters describing an event or a personal experience. An important objective of the course will be familiarizing the students with basic facts about the geography, history, and culture of the Arab world.

### [113-114 Egyptian Arabic

113, fall; 114, spring. 4 credits each term. 113: no prerequisite. Prerequisite for NES 114: 113 or permission of instructor. All texts in Roman alphabet. Not offered 1990-91.]

### 181-182 Elementary Turkish

181, fall; 182, spring. 6 credits each term.

M-F 11:15-12:05. Staff.

This course aims at developing speaking, reading, and writing skills in modern Turkish. The fall term will be devoted primarily to intensive study of grammar but will include simple reading and writing exercises. Oral drill and conversation practice will be integrated into all class periods. In the spring term, while the study of grammar will continue, more time will be devoted to reading and writing. Oral practice will include both informal conversation and structured situations.

### 201-202 Intermediate Modern Hebrew I and II (also Jewish Studies)

201, fall; 202, spring. Enrollment limited to 15 students each term. 4 credits each term.

Prerequisites for NES 201, 102 or permission of instructor; for NES 202, 201 or permission of instructor. Satisfactory completion of NES 202 fulfills the proficiency portion of the language requirement.

M T W R 10:10-11. N. Scharf.

Second-year modern Hebrew. Continued development of reading, writing, composition, listening, and speaking skills. (1) Oral comprehension and production: (a) in the classroom—ability to carry on a conversation, listen to a short lecture, or deliver a short lecture on topics covered in the classroom or related topics; (b) in the outside world—ability to interact with speakers of Hebrew and exchange ideas on basic interests and current events, in work or study situations or informal gatherings, and to relay simple information and give directions. (2) Reading: (a) in the classroom—ability to read simplified short stories, short news items, and newspaper headlines; (b) in the outside world—ability to read short newspaper items, work directions, maps, plans, etc. (3) Writing: (a) in the classroom—ability to write short compositions, take notes in class, compose schedules, write out directions, etc.; (b) in the outside world—ability to write letters, reports, and summaries of events, and to complete questionnaires. (4) Culture: expand knowledge of culture into some areas of literature, popular culture, and historical background.

### 211-212 Intermediate Arabic

211, fall; 212, spring. 4 credits each term.

Prerequisites: for NES 211, one year of Arabic or permission of instructor; for NES 212, 211 or permission of instructor.

M T W R 12:20-1:10. M. Younes.

A sequel to NES 111-112. Continued development of the four language skills through extensive use of graded materials on a wide variety of topics. More attention will be given to developing native-like pronunciation and to grammatical accuracy than in NES 111-112, but the main focus will be on encouraging ideas in it. The student who successfully completes 212 will be able to: 1) understand and express himself or herself in Arabic in situations beyond the basic survival needs; 2) read and comprehend written Arabic of average difficulty; 3) write a letter, a summary of a report or a reading selection, etc. An appreciation of Arabic literature and culture will be sought through the use of authentic materials.

### [238 Aramaic

Spring. 3 credits. Not offered 1990-91.]

### [283-284 Intermediate Turkish

283, fall; 284, spring. 3 credits. Not offered 1990-91.]

### 301-302 Advanced Modern Hebrew I and II (also Jewish Studies)

301, fall; 302, spring. 4 credits each term.

Prerequisite for NES 301: 202 or equivalent with permission of instructor. Prerequisite for NES 302: 301 or equivalent with permission of instructor. This sequence may be used as literature to fulfill the humanities distribution requirement.

M W F 12:20-1:10. N. Scharf.

Advanced study of Hebrew through the analysis of literary texts and expository prose. This course employs a double perspective: the language is viewed through the literature and the literature through the language. Students will develop composition skills by studying language structures, idioms, and various registers of style.

### 311-312 Advanced Arabic

311, fall; 312, spring. 4 credits each term.

Prerequisite for NES 311: NES 212 or permission of instructor; prerequisite for NES 312: NES 311.

M W F 2:30-3:20. Fall, M. Younes; spring, S. Mehrez.

Students will be introduced to authentic, unedited Arabic language materials ranging from short stories and novels to political speeches and writings. Emphasis will be on developing fluency in oral expression through lively discussions of socially and politically provocative issues that are presented in the reading selections. A primary objective will be increased accuracy in pronunciation and grammar.

### [330-331 Hieroglyphic Egyptian

330, fall; 331, spring. 4 credits each semester. Not offered 1990-91.]

### [333-334 Elementary Akkadian (also NES 633-634)

333, fall; 334, spring. 4 credits each term.

Prerequisite for NES 334: NES 333 or permission of instructor. Not offered 1990-91.]

### 335-336 Readings in Akkadian Texts (also NES 635-636)

335, fall; 336, spring. 4 credits. Prerequisite for NES 335: 334; prerequisite for NES 336: 335.

Hours to be arranged. D. I. Owen.

Selected readings in Akkadian texts.

### [337-338 Ugaritic

337, fall; 338, spring. 4 credits. Not offered 1990-91.]

### 412 Introduction to Arabic Linguistics (also DMLL 512)

Spring. 4 credits. Prerequisites: one year of Arabic and an introductory course in linguistics or permission of instructor.

T R 1:25-2:40. M. Younes.

The course offers a survey of major issues in Arabic linguistics, particularly diglossia (the roles of Modern Standard Arabic and the spoken dialects), phonology, morphology, and syntax. Students will have the opportunity to do an in-depth study of a specific topic of their choice.



**625 West Semitic Inscriptions**

Fall. 4 credits. Prerequisite: knowledge of Hebrew.

T R 2:55-4:10. G. Rendsburg.

A study of the major inscriptions of the west semitic languages of the Iron Age. These include texts in Hebrew, Aramaic, Phoenician, Ammonite, and Moabite.

**635 Readings in Akkadian Texts (also NES 335)**

Fall. 4 credits.

Hours to be announced. D. I. Owen.

For description see NES 335 under Near Eastern Studies Languages.

**Archaeology****243 The History and Archaeology of Ancient Israel (also Jewish Studies and Religious Studies)**

Spring. 4 credits.

T R 11:40-12:55. D. I. Owen.

A detailed survey of the history and archaeology of the land of Canaan from the traditional origins of the Israelite tribes in the early second millennium/middle Bronze Age (ca. 2000 B.C.E.) through the Babylonian exile to the arrival of Ezra and Nehemiah (ca. 450 B.C.E.). Lectures on, and discussions of, Biblical and Near Eastern literary sources relating to the history of ancient Israel, as well as an analysis of the archaeological evidence, will form the basis of the course. (This course is recommended for students planning to participate in NES 364, Introduction to Field Archaeology in Israel.)

**[261 Ancient Seafaring (also Archaeology 275)]**

Fall. 3 credits. Not offered 1990-91.]

**[263 Introduction to Biblical History and Archaeology (also Jewish Studies)]**

Summer. 3 credits. Not offered 1990-91.]

**[264 Agriculture and Society in the Ancient Near East]**

Spring. 3 credits. Not offered 1990-91.]

**[267 Mediterranean Archaeology (also Classics 219)]**

Fall. 3 credits. Not offered 1990-91.]

**[361 Interconnections in the Eastern Mediterranean World in Antiquity]**

Fall. 4 credits. Not offered 1990-91.]

**[362 The History and Archaeology of Ebla]**

Fall. 4 credits. Prerequisite: Archaeology 100 or any introductory course in ancient history or archaeology. Not offered 1990-91.]

**364 Introduction to Field Archaeology in Israel (also Jewish Studies)**

Summer. 6 credits.

D. I. Owen.

An introduction to archaeology fieldwork—excavation techniques, pottery analysis, and recording. Materials studied will range from the early Bronze Age to the Roman period. Emphasis also on the role archaeology plays in the reconstruction of biblical history and the various approaches used to achieve that reconstruction. On-site supervision will be supplemented by regular lectures on the history, culture, and literature of the peoples whose remains will be exposed. Requirements include regularly assigned readings and two papers. Graduate credit by special arrangement. Please contact department (255-6275) for further details.

**[365 The Divided Monarchy (also Jewish Studies)]**

Fall. 4 credits. Prerequisite: NES 243 or permission of instructor. Not offered 1990-91.]

**[366 The History and Archaeology of the Ancient Near East (also Archaeology 310)]**

Fall. 4 credits. Not offered 1990-91.]

**[367 The History and Archaeology of Ancient Egypt]**

Fall. 4 credits. Not offered 1990-91.]

**[461 Seminar in Syro-Palestinian Archaeology: The Israelite Conquest of Canaan (also Jewish Studies)]**

Fall. 4 credits. Not offered 1990-91.]

**Civilization****[157 Introduction to Islamic Civilization]**

Fall. 3 credits. Not offered 1990-91.]

**[197]-198 Introduction to Near Eastern Civilization**

[197 not offered 1990-91]; 198, spring. 3 credits. Required for all department majors. NES 197 or 198 and any other Near Eastern studies course will constitute a sequence to fulfill the distribution requirement in either the social sciences or the humanities, depending on the second course used in combination with 197 or 198.

T R 1:25-2:40. R. Brann.

This course is designed to provide an introductory overview of Near Eastern society and culture from ancient to modern times for students with little or no previous training. Lectures will focus on four major periods of Near Eastern history: ancient, biblical, Islamic, and modern. In each historical period we will consider the development of major religious ideas, social and political institutions, economic structures, and literary forms. Readings will be chosen from primary sources in translation and modern secondary materials. In addition, movies, slides and other visual materials will be used as integral parts of the course.

**[234 Muslims, Christians, and Jews in Islamic Spain: Literature and Society (also Comparative Literature 234 and Jewish Studies)]**

Spring. 3 credits. Not offered 1990-91.]

**250 Shi'ism and the Iranian Revolution (also Religious Studies)**

Fall. 3 credits.

M W F 9:05-9:55. J. Katz.

This course explores the classical roots of a contemporary phenomenon. How did shi'ism become the state religion of Iran? How did the attitude of the clergy toward political power evolve? How did Khomeini and the clergy emerge at the helm of the Iranian revolution? Finally, what makes the Iranian revolution so revolutionary? In addition to examining the transformation of shi'ism from a sectarian doctrine to a radical ideology, we will also examine the social origins and consequences of the Iranian revolution. As the revolution enters its second decade, who has gained and who has lost? How does life under Khomeini and his successors differ from life under the Shah?

**253 An Introduction to the History of Iran**

Spring. 3 credits.

M W F 9:05-9:55. J. Katz.

At the crossroads of Asia, Iran has endured a succession of foreign conquests and challenges from Greeks, Arabs, Turks, Mongols, and modern European states. In addition to surveying major historical events and social movements since the Arab conquest of 642, this course will serve as an introduction to Iranian cultural and intellectual achievements. The broad theme of this course is the resiliency of a distinctly Iranian culture and identity. By semester's end we will consider the following questions: How was the Iranian national identity propagated and maintained? What elements in Islamic civilization may be thought of as specifically Persian contributions? Is a national culture the same as "nationalism" in an Islamic context? How has contact with the West caused Iranians to re-examine their culture and history?

**[282 Culture and Society of the Turks]**

Spring. 3 credits. Not offered 1990-91.]

**[293 Judaism, Christianity, and Islam in Comparative Perspective (also Jewish Studies)]**

Spring. 3 credits. Not offered 1990-91.]

**[297 Beyond the Stereotype: Images of Women in the Middle East (also Women's Studies 297)]**

Spring. 3 credits. Not offered 1990-91.]

**[346 Jews of Arab Lands (also Jewish Studies)]**

Fall. 4 credits. Not offered 1990-91.]

**351 Introduction to Islamic Law (also Religious Studies)**

Spring. 4 credits.

T R 1:25-2:40. D. Powers.

An examination of the historical development of Islamic law from its formative period to modern times, with special emphasis on the laws of personal status (marriage, divorce, and inheritance). Topics to be discussed will include the origins of Islamic law; the relationship between law and society; the nature and function of legal documents; the impact of colonialism on legal institutions; and the problems and challenges of legal reform.

**[352 Islam and the West]**

Spring. 3 credits. Not offered 1990-91.]

**[357 Islamic Law and Society]**

Fall. 4 credits. Not offered 1990-91.]

**History****243 History and Archaeology of Ancient Israel (also Jewish Studies)**

Spring. 4 credits.

For description see NES 243 under Near Eastern Archaeology.

**248 Introduction to Classical Jewish History (also Jewish Studies)**

Fall. 3 credits.

M W F 11:15–12:05. S. Schwartz.

A survey of the major developments in Jewish history between the destruction of the first temple in 586 B.C.E. and the rise of Islam. Topics will include the return under Ezra and Nehemiah; the encounter with Hellenism; the Antiochene persecutions; the growth of Roman influence; the rebellion of 70 C.E.; the rise of such Jewish groups as the Sadducees, Pharisees, and Essenes; the conflict with early Christianity; and the nature of rabbinic Judaism.

**249 Introduction to Modern Jewish History (also Jewish Studies)**

Spring. 3 credits.

M W F 11:15–12:05. S. Schwartz.

A survey of the major developments in Jewish history between the expulsion from Spain (1492) until 1900. Topics will include the growth of mysticism and Hasidism; the development of Eastern European Jewry; the impact of emancipation; the rise of Jewish pluralism, e.g., Reform Judaism, Conservative Judaism, Neo-Orthodoxy; the character of modern anti-Semitism; the origins and growth of American Jewry; and the beginnings of political Zionism.

**257 Islamic History: 600–1258 (also Religious Studies)**

Fall. 3 credits.

T R 3:35–4:25; F 2:30–3:20. D. Powers.

A survey of Islamic history from the lifetime of Muhammad to the Mongol conquest of Baghdad with special emphasis on contacts between the Islamic world and the West. Topics to be discussed will include the emergence of Islam as a major world religion; the effect of the Arab conquests on the unity of the Mediterranean world; political, cultural, and economic contacts between the Near East and Europe; the Crusades; and the Spanish Reconquista.

**[258 Islamic History, 600–1517]**

Fall. 3 credits. Not offered 1990–91.]

**[259 The Ottoman Empire from 1517 to 1923]**

Spring. 3 credits. Not offered 1990–91.]

**[261 Ancient Seafaring (also Archaeology 275)]**

Not offered 1990–91.]

**[264 Agriculture and Society in the Ancient Near East]**

Spring. 3 credits. Not offered 1990–91.]

**[277 Seminar in Jewish History (also Jewish Studies)]**

Spring. 3 credits. Not offered 1990–91.]

**[281 Gender and Society in the Muslim Middle East (also Women's Studies 281)]**

Fall. 3 credits. Not offered 1990–91.]

**294 Modern History of the Middle East: Changing Politics, Society, and Ideas (also Government 358)**

Fall. 4 credits. Fulfills the college distribution requirement in history or the social sciences.

M W F 2:30–3:20. M. Winter.

This introductory course is designed to acquaint students with the main political, social, and cultural trends that have shaped the modern and contemporary history of the Middle East. While discussing developments in the region during the nineteenth and twentieth

centuries, the lectures will focus on such themes as modernization, nationalism, Islamic response, and Arab politics in the global and regional contexts. The course does not presuppose the knowledge of Middle Eastern languages.

**351 Introduction to Islamic Law**

Spring. 4 credits. D. Powers.

For description see NES 351 under Near Eastern Civilization.

**[352 Islam and the West]**

Spring. 3 credits. Not offered 1990–91.]

**[355 Islam and Politics]**

Spring. 4 credits. Not offered 1990–91.]

**[358 The Islamic Resurgence]**

Spring. 4 credits. Prerequisite: NES 258 or NES 294. Not offered 1990–91.]

**[361 Interconnections in the Eastern Mediterranean World in Antiquity]**

Fall. 4 credits. Not offered 1990–91.]

**[362 The History and Archaeology of Ebla]**

Not offered 1990–91.]

**[365 The Divided Monarchy (also Jewish Studies)]**

Not offered 1990–91.]

**[366 Archaeology of the Ancient Near East (also Archaeology 310)]**

Fall. 4 credits. Not offered 1990–91.]

**[367 The History and Archaeology of Ancient Egypt]**

Fall. 4 credits. Not offered 1990–91.]

**397 Topics in the Middle East: Islam and the State in the Middle East (also Government 352)**

Spring. 4 credits.

T R 11:40–12:55. M. Winter.

The seminar aims to survey and analyze the problematic relationship between Islam and the modern nation-state in the Middle East, against the historical background of the region. The first part of the course will address the pervasive patterns of this relationship. The second part will be devoted to case studies of the various countries in the Middle East: the Arab states and the Palestinian Arabs, Turkey, and Iran.

**453 Islam in South Asia (also History 417)**

Fall. 4 credits.

F 2:30–4:25. R. Ahmed.

This course will examine the dominant features of South Asia, including the nature of beliefs and practices and the rituals and institutions of their different local contexts. One of the major objects of this course is to demonstrate that Islam never functioned as a monolithic system in South Asia and developed its own traditions in different local contexts, which did not necessarily conform to the orthodox interpretations by the ulema. It will conclude with a consideration of the major Islamic movements in South Asia Islam in more recent times.

**682 International Relations of the Middle East (also Government 682)**

Spring. 4 credits.

T 1:25–3:20. S. Telhami.

The focus of this seminar will be the contemporary international relations of the Middle East, with special attention paid to patterns of relations among states of the Middle East and to the international and domestic variables that could account for these patterns. In Part I of the seminar, we will study a) the ways in which

superpower competition and changing objectives affect the relations of states in the Middle East; b) the extent to which a change in the distribution of political, military, and economic power in the Middle East alters politics in the region; and, c) the impact of domestic variables on the foreign policies of states in the Middle East. In Part II, we will examine three major international crises in the Middle East: the Arab-Israeli conflict, the Iran-Iraq conflict, and the crisis in Lebanon.

**Literature****[155 Classics of the Arabic Literary Tradition]**

Fall. 4 credits. Not offered 1990–91.]

**220 The New Testament (also Classics 202)**

Spring. 3 credits. Prerequisite: at least one year of ancient Greek (Classics 101–103 or permission of instructor).

M W F 9:05–9:55. J. Rusten.

Selections in Greek from all four gospels and the letters of Paul, with special attention to Luke, Acts, and Corinthians I–II.

**[221 Readings in Classical Hebrew Literature: The Art of Biblical Narrative (also Jewish Studies)]**

Fall. 3 credits. Prerequisite: one year of Hebrew, biblical or modern. May be used as literature to satisfy the humanities distribution requirement. Not offered 1990–91.]

**[222 Readings in Classical Hebrew Literature: The Art of Biblical Poetry (also Jewish Studies)]**

Spring. 3 credits. Not offered 1990–91.]

**223 Introduction to the Bible (also Jewish Studies and Religious Studies)**

Fall. 3 credits.

T R 1:25–2:40. G. Rendsburg.

This course will survey the main historical, religious, and literary issues raised by a close textual reading of the Hebrew Bible (from Genesis to Deuteronomy). It will be concerned with both situating the Bible in its ancient Near Eastern context as well as with discerning its meaning for contemporary reality. All readings will be in English translation.

**[224 Wisdom Literature: An Introduction]**

Spring. 3 credits. Not offered 1990–91.]

**[226 Exodus and Conquest]**

Spring. 3 credits. Not offered 1990–91.]

**[227 Introduction to the Prophets]**

Spring. 3 credits. Not offered 1990–91.]

**[228 Genesis (also NES 628 and Jewish Studies)]**

Fall. 3 credits. Not offered 1990–91.]

**[231 Classics of Hebrew Literature: A Survey of the Hebrew Literary Tradition (also Comparative Literature 231 and Jewish Studies)]**

Fall. 3 credits. Not offered 1990–91.]

**[233 The Lyrics of Love and Death: Medieval Hebrew Poetry in Translation (also Medieval Studies 233 and Comparative Literature 333 and Jewish Studies)]**

Spring. 3 credits. Not offered 1990–91.]

**[236 Israel: Literature and Society]**

Spring. 3 credits. Not offered 1990–91.]

**[251 The Modern Arabic Novel]**  
Spring. 3 credits. Not offered 1990–91.]

**[252 Arabian Nights in the East and the West]**  
Spring. 3 credits. Not offered 1990–91.]

**256 A Quest for Identity: The Arabic Short Story**

Fall. 3 credits.

M W F 1:25–2:15. S. Mehrez.

After a long period of colonization and cultural isolation, the question of identity becomes very urgent for Middle Eastern writers. Through readings of Arabic fiction in English translation we will explore how Arab writers continue to mold a tradition of short-story writing that reflects (both formally and thematically) a direct engagement in their sociopolitical and cultural context.

**279 Jewish Sectarian Literature in Late Antiquity (also Jewish Studies and Religious Studies)**

Spring. 3 credits.

M W F 2:30–3:20. S. Schwartz.

This course examines the challenge to Judaism's social, legal, and religious institutions posed by adherents of apocalyptic and other sectarian ideologies in antiquity. The focus is on the Dead Sea Scrolls and the Qumran community but will include literature from other communities in the Greco-Roman era fourth century B.C.E. to second century C.E. All readings in English translation. We will focus on the imagery and rhetoric of apocalyptic ideology in our analysis of literary texts. We will arrive inductively at a definition of apocalyptic, both as a movement and as literature. Sources include readings from the prophets, Enoch, Jubilees, Dead Sea Scrolls, 4th Ezra, Revelation.

**[291 Women in Jewish Literature: Tradition and the Literary Imagination (also Women's Studies 291 and Jewish Studies)]**

Spring. 3 credits. Open to freshmen. Not offered 1990–91.]

**[292 Women in the Hebrew Bible (also Women's Studies 292 and Jewish Studies)]**

Fall. 3 credits. Open to freshmen. Not offered 1990–91.]

**[303 Seminar in Modern Hebrew Literature: The Short Story (also Jewish Studies)]**

Fall. 4 credits. Not offered 1990–91.]

**[304 Seminar in Modern Hebrew Literature: The Novel (also Jewish Studies)]**

Spring. 4 credits. Not offered 1990–91.]

**[313 The Arab Writer and the State]**  
Fall. 4 credits. Not offered 1990–91.]

**[322 Undergraduate Seminar in Biblical Literature: Prophecy in Ancient Israel]**

Spring. 4 credits. Not offered 1990–91.]

**[332 Ancient Near Eastern Literature]**  
Spring. 4 credits. Not offered 1990–91.]

**[402 Seminar in Hebrew Literature and Poetics (also Jewish Studies)]**

Spring. 4 credits. Prerequisites: NES 301 or equivalent and permission of instructor. Not offered 1990–91.]

**411 Readings in Classical Arabic Texts (also Medieval Studies 411)**

Fall. 4 credits.

Hours to be announced. D. Powers.

Selected readings in a variety of classical Arabic texts.

**[420 Readings in the Hebrew Bible (also Jewish Studies)]**

Fall. 4 credits. Prerequisite: one year of Hebrew, biblical or modern. May be repeated for credit. Not offered 1990–91.]

**[421 Readings in Biblical Hebrew Poetry (also Jewish Studies)]**

Fall. 4 credits. Prerequisite: one year of biblical or modern Hebrew. May be repeated for credit. Not offered 1990–91.]

**428 Medieval Biblical Hebrew Exegesis (also Jewish Studies and Religious Studies)**

Spring. 4 credits. Prerequisite: Advanced knowledge of Hebrew or permission of instructor.

W 2:30–4:10. R. Brann.

This seminar will concern itself with the reading and analysis of some of the basic works of the medieval Hebrew biblical interpretive tradition. The primary emphasis will be on providing students with the skills necessary to use this important literature by themselves. Readings will be chosen from such classic commentators as Abraham Ibn Ezra, Moses ben Nachman, and David Kimche.

**[429 Readings in the New Testament (also Comparative Literature 429)]**

Spring. 4 credits. Limited to 25 students. Not offered 1990–91.]

**[432 Readings in Judeo-Arabic: Medieval Judeo Arabic and Hebrew Poetics (also Jewish Studies)]**

Spring. 4 credits. Prerequisite: Arabic 212, Hebrew 202, or equivalents. Designed for graduate students but open to undergraduates with permission of instructor. Entire sequence may be repeated for credit; readings will vary from year to year. Not offered 1990–91.]

**491–492 Independent Study, Undergraduate Level**

Fall or spring. Variable credit. Prerequisite: permission of instructor.  
Staff.

**499 Honors Seminar: Independent Study**

Fall or spring. Variable credit. Prerequisite: permission of instructor.  
Staff.

**635–636 Readings in Akkadian Texts (also NES 335–336)**

635, fall; 636, spring. 4 credits.

T R 2:55–4:10. David I. Owen.

For description see NES 335–336 under Near Eastern Languages.

**[628 Genesis (also NES 228 and Jewish Studies)]**

Fall. 4 credits. Not offered 1990–91.]

**691–692 Independent Study, Graduate Level**

Fall or spring. Variable credit. Prerequisite: permission of instructor.  
Staff.

## The Program of Jewish Studies

**244 Jurisprudence and the Holocaust**  
Fall. 2 credits.

M 9:05–11:00. N. Sher.

Please see Program of Jewish Studies under "Special Programs and Interdisciplinary Studies" for complete description.

**247 Seminar: The Eichmann Case**  
Spring. 2 credits. Prerequisites: 241 and/or 244 or permission of instructor. Enrollment limited to 20 students.

M 9:05–11:00. N. Sher.

Please see Program of Jewish Studies under "Special Programs and Interdisciplinary Studies" for complete description.

**404 History Into Fiction: Nazis and the Literary Imagination (also Comparative Literature 404, English 404, and Jewish Studies)**

Fall. 4 credits.

T R 11:40–12:55. E. Rosenberg.

Please see Program of Jewish Studies under "Special Programs and Interdisciplinary Studies" for complete description.

## Related Courses in Other Departments

Archaeology  
Classics  
Comparative Literature  
Economics  
German Studies  
Government  
English  
History  
History of Art  
Medieval Studies  
Modern Languages and Linguistics  
Philosophy  
Society for the Humanities  
Sociology  
Women's Studies

## NEPALI

See Department of Modern Languages and Linguistics.

## PHILOSOPHY

N. L. Sturgeon, chair; K. A. Appiah, R. N. Boyd, M. D. Crimmins, G. Fine, C. A. Ginet, H. Hodes, T. H. Irwin, J. Jarrett, N. Kretzmann, D. Lyons, R. W. Miller, S. Shoemaker, M. Wachsberg, A. W. Wood

The study of philosophy provides students with an opportunity to become familiar with some of the ideas and texts in the history of thought while developing analytical skills that are valuable in practical as well as academic affairs. It affords the excitement and satisfaction that come from understanding and working toward solutions of intellectual problems. The curriculum includes offerings in the history of philosophy, logic, philosophy of science, ethics, social and political philosophy, metaphysics, and theory of knowledge. Any philosophy course numbered in the 100s or 200s is suitable for beginning study in the field. Sections of Philosophy 100 are part of the freshman writing seminar program; they are taught by various members of the staff on a variety of philosophical topics, and because of their small size (seventeen students at most) they provide ample opportunity for discussion.

Students who want a broad introduction to philosophy may take Philosophy 101, but many students with special interests may find that the best introduction to philosophy is a 200-level course in some particular area of philosophy; such courses have no prerequisites and are usually open to freshmen.

### The Major

Students expecting to major in philosophy should begin their study of it in their freshman or sophomore year. Admission to the major is granted by the director of undergraduate studies of the department on the basis of a student's work during the first two years. Eight philosophy courses are required for the major. They must include at least one course in ancient philosophy (Philosophy 210 or 211, or a course with a large component on Plato or Aristotle), at least one course in classical modern metaphysics and epistemology. (Philosophy 212 or a course on the empiricists, the rationalists, or Kant), and a minimum of three courses numbered above 300, at least one of which must be numbered above 400 (and be other than 490). A course in formal logic (e.g., Philosophy 231), while not required, is especially recommended for majors or prospective majors.

Philosophy majors must also complete at least 8 credits of course work in related subjects approved by their major advisers. Occasionally majors may serve as teaching or research aides, working with faculty members familiar with their work.

**Honors.** A candidate for honors in philosophy must be a philosophy major with an average of B- or better for all work in the College of Arts and Sciences and an average of B+ or better for all work in philosophy. In either or both terms of the senior year a candidate for honors enrolls in Philosophy 490 and undertakes research leading to the writing of an honors essay by the end of the final term. Honors students normally need to take Philosophy 490 both terms of their senior year in order to write a satisfactory honors essay. Prospective candidates should apply at the philosophy department office, 218 Goldwin Smith Hall.

### Fees

In some courses there may be a small fee for photocopying materials to be handed out to students.

### Introductory Courses

These courses have no prerequisites; all are open to freshmen.

#### 100 Freshman Seminar in Philosophy

Fall and spring. 3 credits.

Fall: M W F 9:05, staff; 10:10, H. Hodes; 11:15, 12:20, staff; T R 10:10-11:25, R. Boyd; 11:40-12:55, M. Crimmins and staff; 1:25-2:15, staff; 2:55-4:10, R. Miller; M W 7:30-8:45 p.m., staff. Spring: M W F 10:10, staff; 11:15, 12:20, staff; 1:25-2:15, J. Jarrett; T R 10:10-11:25, 11:40-12:55, 2:55-4:10, staff; M W 7:30-8:45 p.m., staff.

#### 101 Introduction to Philosophy

Fall and spring. 3 credits. Normally offered in the six-week summer session.

Fall: M W F 11:15. S. Shoemaker.

This course will deal with a number of the central problems of philosophy, including the existence of God, our knowledge of the external world, the mind-body problem, free

will and the foundations of morality. Readings will consist partly of selections from such perennially important philosophers as Descartes, Berkeley, Hume, and J. S. Mill, and partly of more recent writings. Two lectures and one section per week.

Spring: M W F 10:10. M. Crimmins.

A broad introduction to philosophical thinking and central philosophical questions. We will discuss questions of epistemology (what can we know for sure?), religion (are there good reasons to believe that God exists?), philosophy of mind (is your mind just the same thing as your brain? could a computer think? do you really have free will?), and ethics (what is it to make the right choice, or to do a good thing, or to be moral? what is justice? is it wrong not to contribute to charities? is reverse discrimination wrong?). The emphasis will be on careful analytic thinking about these difficult issues. Readings will be chosen from classic and contemporary writers. Two lectures and one section each week.

#### [131 Logic: Evidence and Argument

3 credits. Not offered 1990-91.]

#### 201 Philosophical Problems

Spring. 4 credits.

M W F 9:05. C. A. Ginet.

This course will discuss the following well-known puzzles: Zeno's paradoxes of motion (the Racecourse, the Arrow, the Stadium), Zeno's paradox of plurality, the paradox of the heap, the paradox of the liar, the paradox of the surprise examination, the prisoner's dilemma, and Newcomb's problem. These puzzles present us with reasoning that is paradoxical in the sense that, although it seems clear that there must be something wrong with the reasoning, it is not easy to say what it is. Besides being an intriguing exercise in itself, studying such puzzles can show interesting and important things about some of our basic concepts, such as those of space, time, motion, truth, knowledge, rational choice, and causation.

#### [210 Ancient Thought

Fall. 4 credits. Not offered 1990-91.]

#### 211 Ancient Philosophy

Fall. 4 credits. Normally offered in the six-week summer session.

T R 1:25-2:40. J. Whiting.

A survey of the origins of western philosophical thought (both scientific and moral) in the attempts of ancient Greeks (from the Presocratics through Plato and Aristotle to the Stoics, Sceptics and Epicureans) to understand the natural world and their place in it. Special attention will be paid to the relationship of moral and political thought to natural philosophy.

#### 212 Modern Philosophy

Spring. 4 credits. Normally offered in the six-week summer session.

T R 11:40-12:55. E. Vailati.

A survey of major philosophical problems in metaphysics and the theory of knowledge in seventeenth- and eighteenth-century European philosophy. Readings from Descartes, Spinoza, Locke, Leibniz, Berkeley, Hume, and Kant.

#### 213 Existentialism

Fall. 4 credits.

T R 10:10-11:25. A. Wood.

A study of selected writings, literary as well as philosophical, of four major existentialist thinkers in the nineteenth and twentieth centuries: Kierkegaard, Dostoyevsky, Nietzsche, and Sartre.

#### [214 Philosophical Issues in Christian Thought

4 credits. Not offered 1990-91.]

#### [215 Medieval Philosophy

Fall. 4 credits.

T R 10:10-11:25. N. Kretzmann. Not offered 1990-91.]

#### 231 Introduction to Formal Logic

4 credits. Normally offered in the six-week summer session.

Fall: M W F 9:05, C. A. Ginet. Spring: T R 10:10-11:25, H. Hodes; disc, 1 hour each week to be arranged.

Analysis and evaluation of deductive reasoning in terms of formalized languages. The logic of sentences, predicates, and quantifiers. (This course, rather than Philosophy 331, is the recommended introductory formal logic course.)

#### 241 Ethics

Spring. 4 credits.

T R 2:55-4:10. R. Miller.

Introduction to the philosophical study of major moral questions: Are all values relative, or are there some objective moral values? Can ethics be a science? Is human nature inevitably selfish? Have we ever any good reason to care about the interests of other people? Do people have rights with which governments should not interfere, even to advance the general welfare? What inequalities are unjust? The course discusses these general issues in moral philosophy, together with some of their implications for particular current moral controversies, such as the debates over abortion, reverse discrimination, and policies reducing economic inequality. Readings from major philosophers of the past—for example, Hobbes, Mill, and Marx—as well as contemporary sources. In 1990-91, the course will be specially concerned with theories of justice, liberty, and equality from Hobbes to the present.

#### [242 Social and Political Theory

4 credits. Not offered 1990-91.]

#### [243 Aesthetics

4 credits. Not offered 1990-91.]

#### [244 Philosophy and Literature

Fall. 4 credits. Not offered 1990-91.]

#### 245 Ethics and Health Care (also Biology and Society 205 and Biological Sciences 205)

Fall. 4 credits. Normally offered in the six-week summer session. Limited to 80 students. (40 under philosophy, 15 under Biology and Society, and 25 under Biological Sciences). Registered students not attending the first week will be dropped from the course. Open to sophomores, juniors, and seniors; permission of instructor required for graduate students.

Lecs, T R 10:10-11:25; disc, 1 hour each week to be arranged. M. Wachsberg.

Critical philosophical analysis of the conceptual frameworks in which ethical problems associated with health care can be formulated and solutions evaluated. General topics (with sample issues indicated in parentheses) include knowledge in ethics (ethical scepticism, ethical relativism); proper social allocation of resources for, and within, medicine (entitlement to health care, access to scarce medical resources, cost-benefit analysis); the proper account of basic concepts such as illness, death, autonomy, and personhood (abortion, euthanasia, procreative technologies); and the professional-patient relationship (informed



consent, confidentiality, medical paternalism). Note: a more detailed description of this course is available in the philosophy department office.

**246 Ethics and the Environment (also Biology and Society 206 and Biological Sciences 206)**

Spring. 4 credits. Open to all undergraduates. Permission of instructor required for graduate students.

Lecs, T R 10:10–11:25; disc, 1 hour each week to be arranged. M. Wachsberg. Critical *philosophical* analysis of the conceptual frameworks in which policies affecting the environment are formulated and judged. An introductory section of the course discusses the nature of ethics and the possibility of knowledge in ethics. The first major substantive component of the course deals with the nature and extent of individual and social obligations to spatially distant people, future generations, nonhuman animals, and nonsentient things (e.g., the ecosystem). The second major component of the course deals with the appropriate analysis of the origin of environmental problems and the range of options for their solution. Topics include individual vs. collective goods, cost-benefit analysis, and coordination problems. Note: a more detailed description of the course is available in the philosophy department office.

**247 Ethics and Public Life**

Spring. 4 credits.

T R 1:25–2:40. H. Shue. An examination of the relative strength of human responsibilities at three levels: toward intimates, toward compatriots, and toward strangers. At the level of intimates the focus is on feminist critiques of relationships within the conventional family and of gendered roles more generally: how should men and women relate to each other? Attention in the historical arena is on contemporary debates about the basis and scope of the welfare state: how should the well-fed and well-housed deal with fellow citizens who are hungry or homeless? Relationships toward strangers are examined at the international level in the case of distant famines: do the well-fed and well-housed of one nation have responsibilities toward the hungry and homeless of other nations? At all three levels, emphasis is on the meaning and implications of belief in human equality.

**[261 Knowledge and Reality]**

Spring. 4 credits. Not offered 1990–91.]

**262 Philosophy of Mind**

Spring. 4 credits.

M W F 10:10. S. Shoemaker. This course will serve as an introduction to philosophy through a consideration of philosophical issues about the nature of mind. Central to the course will be the mind-body problem; here we will be concerned with the question of whether there is a mind (or soul or self) that is distinct from the body and how thought, feelings, sensations, etc., are related to states of the brain and body. Other issues will include knowledge of other minds (how do we know that other human beings are not mindless automata?), the nature of self-consciousness (how do we know about our own mental states?), the nature of mental representation (how can states of a mind be "about" things and a state of affairs outside it?), and the nature of personal identity (what makes someone existing now and someone existing a year ago one and the same person?).

Written work for the course will consist of several short papers, and a final examination.

**263 Religion and Reason**

Fall. 4 credits.

T R 11:40–12:55. N. Kretzmann. Recent and traditional literature will be taken into account in the examination of such topics as evidence for and against the existence of a god, philosophical problems associated with the attributes of God as described in the great monotheistic religions, and philosophical problems associated with the relationship of God to the physical universe and to human beings.

**286 Science and Human Nature**

Spring. 4 credits.

M W F 11:15. R. N. Boyd. An examination of attempts in the biological and social sciences to offer scientific theories of human nature and human potential and to apply such theories to explain important social and psychological phenomena. Topic for 1990–91: Darwin, social Darwinism, and sociobiology.

**Intermediate Courses**

Some of these courses have prerequisites.

**[309 Plato]**

4 credits. Not offered 1989–90.]

**310 Aristotle**

Spring. 4 credits.

T R 10:10–11:25. J. Whiting. A critical survey of Aristotle's systematic thought from his logical and metaphysical through natural and psychological to moral and political works, with some discussion of his responses to Plato and the Presocratics and his effects on subsequent philosophical thought. Special attention will be paid to the contemporary interest in resuscitating Aristotelian ethics.

**[311 Modern Rationalism]**

4 credits. Not offered 1990–91.]

**312 Modern Empiricism**

Spring. 4 credits.

M W F 2:30. S. Shoemaker. The course will be devoted to the philosophy of Bishop Berkeley, in particular to his *New Theory of Vision*, his *Principles of Human Knowledge*, and his *Three Dialogues between Hylas and Philonous*. As background we will also look at parts of John Locke's *Essay Concerning Human Understanding*. Topics will include Berkeley's views about perception, his attack on Locke's distinction between primary and secondary qualities, his attack on abstract ideas, and, most centrally, his idealism and his attack on the notion of material substance.

**[314 Topics in Ancient Philosophy]**

4 credits. Not offered 1990–91.]

**[315 Special Topics in the History of Philosophy]**

4 credits. Not offered 1990–91.]

**316 Kant**

Fall. 4 credits.

T R 11:40–12:55. A. Wood. Introduction to Kant's main doctrines in metaphysics, theory of knowledge, and ethics. Topics include the possibility of nonempirical knowledge, the nature of space and time and our knowledge of them, proof of the existence of an objective world, why events must have causes, determinism and the possibility of free will, and the basis of morality.

**317 Hegel**

Spring. 4 credits.

T R 1:25–2:40. A. Wood.

An introduction to Hegel's philosophical method, concentrating on its application to issues of ethics and political philosophy in *The Philosophy of Right*.

**[318 Twentieth-Century Philosophy]**

Spring. 4 credits.

Not offered 1990–91.]

**[319 Philosophy of Marx]**

4 credits. Not offered 1990–91.]

**331 Formal Logic**

Fall. 4 credits. Prerequisite: Philosophy 231 or equivalent.

M W F 11:15. H. Hodes.

Review of derivations and other material covered in 231; basic set theory; truth in a model and the semantic definitions of consequence, validity, equivalence, and other logic concepts; and the soundness and completeness of a natural-deduction formalization of elementary logic. Further topics will be covered if time permits.

**[332 Philosophy of Language]**

Not offered 1990–91.]

**341 Ethical Theory**

Spring. 4 credits.

T R 1:25–2:40. M. Wachsberg.

Topic for 1990–91: Consequentialism and its critics.

**342 Law, Society, and Morality (also Law 666)**

Fall. 4 credits.

T R 1:25–2:40. D. Lyons.

This is an introduction to the philosophy of law. It will emphasize the nature of law and its relation to moral principle. Theories to be discussed include natural law, legal positivism, legal realism, and contemporary interpretive and critical theories of law.

**[344 History of Ethics—Ancient and Medieval]**

Not offered 1990–91.]

**[345 History of Ethics—Modern]**

Not offered 1990–91.]

**346 Modern Political Philosophy**

Spring. 4 credits.

M W 2:30–3:45. J. Whiting.

Topics for 1990–91: Feminism and the Liberal Tradition. We will study contemporary feminist analyses (including, among others, those by Catherine MacKinnon and Susan Moller Okin) of classical and contemporary sources in western political thought from Plato and Aristotle through Rousseau and Mill to Rawls and Nozick. Special attention will be paid to recent work in moral psychology (by Gilligan and others) on the relationship between justice and caring.

**[361 Metaphysics and Epistemology]**

Fall. 4 credits.

Not offered 1990–91.]

**[363 Topics in the Philosophy of Religion]**

4 credits. Not offered 1990–91.]

**369 Limiting War: The Morality of Modern State Violence (also Government 469)**

Fall. 4 credits.

T R 2:55-4:10. H. Shue.

Modern states employ or threaten violence not only through conventional war but in various other forms including "low-intensity warfare," chemical and biological warfare, terrorism, and nuclear deterrence. This course critically examines the best arguments about limiting or prohibiting various contemporary means and methods of fighting one's enemies, arguments with conclusions ranging from pacifism to "realism." Have traditional doctrines about just war been overtaken by 20th-century events and technologies, or is it still possible to provide a reasonable justification for limiting war? If so, how? Special emphasis is given to moral issues about nuclear weapons. Readings include *Just and Unjust Wars*, by Walzer, and *Nuclear Deterrence, Morality and Realism*, by Finnis, Boyle, and Grisez, and *Nuclear Deterrence and Moral Restraint* by Shue.

**381 Philosophy of Science: Knowledge and Objectivity**

Fall. 4 credits.

M 7-9:30 p.m. R. N. Boyd.

An examination of central epistemological and metaphysical issues raised by scientific theorizing: the nature of evidence; scientific objectivity; the nature of theories, models, and paradigms; and the character of scientific revolutions. In addition to the contemporary literature in the philosophy of science, readings are also drawn from the history of science and from the works of classical modern philosophers such as Locke, Hume, and Descartes.

**[382 Philosophy and Psychology**

4 credits. Not offered 1990-91.]

**383 Philosophy of Choice and Decision**

Spring. 4 credits.

T R 2:55-4:10. M. Crimmins.

Philosophical issues about rational decision, probability, and inductive reasoning, including Bayesian models of chance, choice and learning, and paradoxes of choice, induction, and cooperation. Some prior familiarity with the mathematics of probability is recommended, but not required.

**384 Philosophy of Physics**

Spring. 4 credits.

M W F 10:10. J. Jarrett.

An introduction to issues arising in a philosophical examination of modern physical science. Relevant aspects of classical statistical mechanics, relativity theory, and quantum mechanics will be considered in connection with such topics as microphysical indeterminateness, probabilistic laws, causality, the direction of time, action-at-a-distance, and scientific explanation.

**[387 Philosophy of Mathematics**

4 credits. Not offered 1990-91.]

**[388 Social Theory**

4 credits. Not offered 1990-91.]

**[389 Philosophy of Science: Evidence and Explanation**

4 credits. Not offered 1990-91.]

**390 Informal Study**

Fall or spring. Credit to be arranged.

Staff.

To be taken only in exceptional circumstances. Must be arranged by the student with his or her adviser and the faculty member who has agreed to direct the study.

**Advanced Courses and Seminars**

These courses are offered primarily for majors and graduate students.

**[395 Majors Seminar**

4 credits. Not offered 1990-91.]

**410 Medieval Latin Philosophical Texts**

Variable credit. Fall and spring. Prerequisites: knowledge of Latin and permission of instructor.

Hours to be arranged. N. Kretzmann. Reading medieval philosophical texts in the original Latin.

**[411 Greek Philosophical Texts (also Classics 311)**

Not offered 1990-91.]

**412 Medieval Philosophy**

Fall. 4 credits.

T 4:15-6:15. N. Kretzmann.

Topic for 1990-91: Aquinas's Philosophy of Mind

**[413 Topics in Ancient Philosophy**

4 credits. Not offered 1990-91.]

**[414 German Philosophy after Kant**

4 credits. Not offered 1990-91.]

**416 Modern Philosophy**

Fall.

T R 10:10-11:25. E. Vailati.

Topic for 1990-91: Selected topics in Leibniz and related seventeenth-century figures. Readings may include the Leibniz-Clarke debate and other writings of Samuel Clarke, as well as selected issues in Leibniz.

**[431 Deductive Logic**

4 credits. Not offered 1990-91.]

**[433 Philosophy of Logic**

4 credits. Not offered 1990-91.]

**436 Intensional Logic (also Mathematics 483)**

Spring. 4 credits. Prerequisites: Philosophy 231 or equivalent or any math or computer science logic course or permission of the instructor. Philosophy 331 or its equivalent is recommended, but not required.

M W F 11:15. H. Hodes.

The abstract concept of consequence; sentential and first-order predicate modal logics and their relationship to classical and intuitionistic logics; several conditional logics; and (time permitting) other related topics.

**[437 Problems in the Philosophy of Language**

4 credits. Not offered 1990-91.]

**441 Contemporary Ethical Theory**

Spring. 4 credits.

W 4:15-6:15. R. Miller.

Topic for 1990-91: The pursuit of objectivity in contemporary meta-ethics and political philosophy.

**442 Ethics and the Philosophy of Mind**

Fall. 4 credits.

T R 1:25-2:40. M. Wachsberg.

A study of the relationship between views about the nature of persons (via a discussion of personal identity), the rationality of self-interest, and the appropriate province of ethics.

**[443 Topics in Aesthetics**

4 credits. Not offered 1990-91.]

**444 Contemporary Legal Theory (also Law 710)**

Spring. 4 credits.

T 4:15-6:15. D. Lyons.

This seminar will consider problems and theories of legal interpretation, especially of statutes and written constitutions. Topics include the role of original intent and of political morality in judicial reasoning.

**[446 Topics in Social and Political Philosophy**

4 credits. Not offered 1989-90.]

**[461 Metaphysics**

Spring. 4 credits. Not offered 1990-91.]

**481 Problems in the Philosophy of Science**

Spring. 4 credits.

M 7:00-9:30 p.m. R. Boyd.

Topic for 1990-91: To be announced.

**490 Special Studies in Philosophy**

Fall or spring. 4 credits. Open only to honors students in their senior year.

Staff.

**611 Ancient Philosophy**

Fall. 4 credits.

Fall: W 4:15-6:15, J. Whiting.

Topics for 1990-91: Aristotle: Individuals and Kinds. We will discuss the roles played by kinds and individuals in Aristotle's metaphysics, epistemology, natural philosophy (including biology and psychology), and ethics (including perhaps his politics). Some attention will be paid to recent discussions of these issues by authors such as Strawson and Wiggins.

**[612 Medieval Philosophy**

4 credits. Not offered 1990-91.]

**[613 Modern Philosophers**

4 credits. Not offered 1990-91.]

**[619 History of Philosophy**

4 credits. Not offered 1990-91.]

**[631 Logic**

4 credits. Not offered 1990-91.]

**633 Philosophy of Language (also Linguistics 700)**

Fall. 4 credits.

M 4:15-6:15. M. Crimmins, F. Landman, S. McConnell-Ginet.

Semantic, pragmatic, metaphysical, and logical issues surrounding vagueness. Topics will include Sorites paradoxes, supervaluation, degrees of truth, and the place of vagueness in the relations among mind, meaning, conversation, and the world.

**[641 Ethics and Value Theory**

4 credits. Not offered 1990-91.]

**661 Theory of Knowledge**

Spring. 4 credits.

R 4:15-6:15. C. Ginet.

Topic for 1990-91: *A priori* knowledge.

**[662 Philosophy of Mind/The Emotions**

4 credits. Not offered 1990-91.]

**663 Philosophy of Religion**

Spring. 4 credits.

M 4:15-6:15. N. Kretzmann.

Topic for 1990-91: Rationality and religion.

**[664 Metaphysics]**

Fall. 4 credits.

R 4:15–6:15. S. Shoemaker.

Topic for 1990–91: Self-knowledge and consciousness.

**[665 Metaphysics]**

4 credits. Not offered 1990–91.]

**[681 Philosophy of Science]**

4 credits. Not offered 1990–91.]

**[682 Philosophy of Social Science]**

4 credits. Not offered 1990–91.]

**700 Informal Study**Fall or spring. Credit to be arranged.  
Staff.

To be taken by graduate students only in exceptional circumstances and by arrangement made by the student with his or her Special Committee and the faculty member who has agreed to direct the study.

**773 Proseminar in Cognitive Studies (also Cognitive Studies 773, Linguistics 773, and Computer Science 773)**

Fall and spring. 2 credits.

R 1:25–2:40. Staff (taught from Cornell's Cognitive Studies Program, representing the fields of computer science, linguistics, psychology, and philosophy).

This is the first term of a year-long lecture-and-discussion course that is intended to provide graduate students with an interdisciplinary introduction to the study of knowledge, its representation, acquisition, and use. Topics may include the psychology of perception and cognition; the philosophy of mind, language, and knowledge; the phonology, syntax, and semantics of natural language; computational approaches to natural language processing, vision and reasoning; parallel distributed processing, and neuropsychology.

**Related Courses in Other Departments****Classics 468 Augustine's Confessions**  
Fall.**Mathematics 481 Mathematical Logic**  
Fall.**Society for the Humanities 420 Mass Culture, Ideology and Philosophy**  
Spring.**PHYSICS**

D. B. Fitchen, chair and director of undergraduate studies (109 Clark Hall, 255-6016); J. P. Alexander, V. Ambegaokar, N. W. Ashcroft, K. Berkelman, D. G. Cassel, G. V. Chester, B. Cooper, R. M. Cotts, P. Drell, V. Elser, M. E. Fisher, C. P. Franck, R. Galik, B. Gittelman, K. Gottfried, B. Greene, L. N. Hand, D. L. Hartill, C. L. Henley, W. Ho, D. F. Holcomb, M. P. Kalos, T. Kinoshita, A. LeClair, D. M. Lee, G. P. Lepage, R. M. Littauer, N. D. Mermin, N. Mistry, J. Orear, J. M. Parpia, R. O. Pohl, J. D. Reppy, R. C. Richardson, D. L. Rubin, E. E. Salpeter, J. P. Sethna, S. L. Shapiro, R. H. Siemann, A. J. Sievers, E. Siggia, R. H. Silsbee, P. C. Stein, S. L. Stone, R. M. Talman, M. P. Teter, S. A. Teukolsky, R. Thorne, M. Tigner, H. Tye, T.-M. Yan, D. R. Yennie

The Department of Physics offers a full range of university-level work in physics, from general education courses for nonscientists to

Ph.D.-level independent research. Major research facilities are operated by two component organizations, the Laboratory of Atomic and Solid State Physics (LASSP) and the Laboratory of Nuclear Studies (LNS). LASSP carries out extensive research efforts in condensed-matter physics and in low-temperature physics. LNS operates a major high-energy particle physics research facility at Wilson Laboratory, the Cornell electron-positron storage ring, called CESR. Theoretical work is carried out in many fields of physics, including astrophysics. There is a full schedule of weekly research-oriented seminars and colloquia. Junior and senior students will find many opportunities for research participation and summer jobs.

Three introductory physics sequences are open to freshmen: 101–102, 112–213–214–315, and 207–208. In addition, there is a cluster of general-education courses, Physics 200 through 206. Physics 101–102, a self-paced autotutorial course, is designed for students who do not intend to take further physics courses and who do not have preparation in calculus. Physics 112 and 207 both require calculus (Mathematics 191 or 111), and additional mathematics is required for subsequent courses in sequence. Physics 101–102 or 207–208 may be taken as terminal physics courses. The three- (or four-) term sequence 112–213–214–315 or its honors version, 116–217–218–315, is recommended for engineers and physics majors.

Courses beyond the introductory level that might be of interest to nonmajors include: Physics 315, Phenomena of Microphysics; Physics 330, Modern Experimental Optics; and Physics 360, Electronic Circuits.

Advanced placement and credit are offered as outlined in "Advanced Placement of Freshmen," or students may consult Professor Cotts, 522 Clark Hall. Transfer students requesting credit for physics courses taken at another college should consult the department office.

**The Major**

Various options permit the student to concentrate heavily on physics or to take less physics and pursue an accompanying constellation of courses in a related area. Those desiring a physics concentration as preparation for professional or graduate work should complete Physics 112–213–214 or 116–217–218, and, if possible, 315 by the end of the sophomore year. A basic preparation for a less intensive physics program may include Physics 112–213–214 or 207–208–214. In either case, it is necessary to complete a concurrent sequence of mathematics courses.

Mathematics 191–192–293–294 are usually recommended, except for students especially interested in continuing the study of mathematics, for whom Mathematics 111–122–221–222 (or equivalent) may be preferred.

Prospective majors are urged to make an early appointment at the physics office for advice in planning their programs. Acceptance into the major is normally granted after completion of a year of physics and mathematics at Cornell with grades of B– or better. The student should propose a tentative plan for completing his or her graduation requirements as well as those for the major. The plan may change from time to time, but it must be approved by the major adviser. The major requirements have two components—a core and a concentration. Core requirements for the major include:

- 1) Physics 112–213–214 or 116–217–218 or 207–208–214.
- 2) an intermediate physics course in each of four areas: (a) mechanics—Physics 318 or 431, (b) electricity and magnetism—Physics 325 or 432, (c) modern physics—Physics 315 or 443, and (d) laboratory physics—Physics 310 (when not taken as substitute for laboratory work in 214 or 218), 330, 360, or 410.

Mathematics courses prerequisite for these physics courses are also necessary. The choice of core is influenced by the intended concentration. For a concentration in physics, Physics 116–217–218 (or 112–213–214), 315, 318, 325, and any 300-level laboratory course is appropriate, while for concentrations outside physics, part (2) of the core might consist of, for example, Physics 315, 360, 431, 432.

The concentration reflects the student's interest in some area related to physics; the array of courses must have internal coherence and be approved by the major adviser. The concentration must include at least 15 credits, with at least 8 credits in courses numbered above 300. Students have chosen to concentrate in such topics as physics, biophysics, chemical physics, astrophysics; geophysics; natural sciences; history and philosophy of science; computational physics; or physics with economics or business. A combined biology-chemistry concentration is recommended for premedical students or those who wish to prepare for work in biophysics. The concentration in natural science is particularly appropriate for teacher preparation.

The concentration in physics is recommended as preparation for professional or graduate work in physics or a closely related discipline. Twelve of the 15 concentration credits must be selected from physics courses numbered above 300 (in addition to those selected for part (2) of the core); Physics 410 must be included within those 12. The following courses are strongly recommended: Physics 341, 443; Mathematics 421, 422, and 423; and at least one of Physics 444, 454, Applied and Engineering Physics 401, 434, Astronomy 431, 432, or Geological Sciences 388.

**Foreign language requirement.** Students interested in eventual graduate work in physics are advised to meet this requirement with French, German, or Russian.

**Honors.** A student may be granted honors in physics upon the recommendation of the Physics Advisers Committee of the physics faculty.

**Double majors.** Double majors with physics are possible and not at all uncommon. However, if a student plans to complete a major in physics as well as majors in one or more other subjects, then the set of courses used to satisfy the physics major must be completely different from the set or sets used to satisfy the other major(s).

**Distribution Requirement**

The requirement in physical sciences is met by any two sequential courses such as Physics 101–102 or 207–208 or 112–213 or any combination of the first term of one sequence and the second term of another. It is also met by any two general education courses from the group 200–206 or by a combination of 101 or 112 or 207 with one from the group 200–206.

## Courses with Overlapping Content

Because the department offers several courses with overlapping content, students should select courses carefully to meet the needs of their academic programs and to ensure credit for each course they take. Listed below are groups of courses with similar content. In general, students may receive credit for only one of the courses in each group.

Physics 101, 112, and 207  
Physics 102 and 208  
Physics 112, 116, and 207  
Physics 208, 213, and 217

## Course Prerequisites

Prerequisites are specified in physics course descriptions to illustrate the materials that students should have mastered. Students who wish to plan programs different from those suggested by the prerequisite ordering are urged to discuss their preparation and background with a physics adviser or with the instructor in the course. In many cases an appropriate individual program can be worked out without exact adherence to the stated prerequisites.

## Courses

### 101-102 General Physics

101, fall; 102, spring (101-102 also normally offered in summer). 4 credits each term. Prerequisites: three years of high school mathematics, including some trigonometry. Prerequisite for Physics 102: Physics 101 or 112 or 207. Includes more modern physics and less mathematical analysis than Physics 207-208 but more mathematics than 200-206. (Students planning to major in a physical science should elect Physics 207-208 or 112-213-214.) A mostly self-paced, mastery-oriented autotutorial format; students work in a learning center at hours of their choice. Repeated tests on each unit are given until mastery is demonstrated.

One opening lecture 7:30 p.m., R Aug. 30 or M Sept. 3 (fall); M Jan. 21 (spring).  
D. B. Fitchen, B. Richardson.

Basic principles treated quantitatively but without calculus. Major topics for 101: kinematics; gravitational and electric forces and fields; momentum, angular momentum, energy; thermal physics, fluid mechanics; sound waves. For 102: electricity and magnetism, optics, relativity; quantum physics, particle structure of matter. Laboratory emphasizes instrumentation, measurement, and interpretation of data. Text: *Principles of Physics*, by Frank J. Blatt.

### 112 Physics I: Mechanics and Heat

Fall or spring (normally also offered in summer). 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisite: coregistration in Mathematics 192 (or 194 or 112), or substantial previous contact with introductory calculus combined with coregistration in Mathematics 191 or 111.

Lecs M W F 10:10 or 12:20; 2 recs each week; six 3-hr. labs. Evening exams: fall, Sept. 27, Oct. 30, Nov. 29; spring, Feb. 14, Mar. 14, Apr. 16. Fall, M. Tigner; spring, R. Littauer.

Mechanics of particles: kinematics, dynamics, conservation laws, central force fields, periodic motion. Mechanics of many-particle systems: center of mass, rotational mechanics of a rigid body, static equilibrium. Introduction to thermodynamics. At the level of

*Fundamentals of Physics*, extended version, by Halliday and Resnick.

### 116 Physics I: Mechanics and Heat

Fall or spring. 4 credits. A more analytic version of Physics 112, intended for students who will be comfortable with a deeper, somewhat more abstract approach. (Intended mainly but not exclusively for prospective physics majors.) Prerequisites: a good secondary school physics course and familiarity with basic calculus. Corrective transfers between Physics 116 and Physics 112 (in either direction) are encouraged during the first few weeks of instruction.

Lecs, M W F 10:10; 2 recs each week; one 3-hr. lab alternate weeks. Evening exams may be scheduled. Fall, D. G. Cassel; spring, B. Gittelman.

A more rigorous version of Physics 112, covering similar topics at the level of An Introduction to Mechanics, by Kleppner and Kolenkow.

### 200 Art, Isotopes, and Analysis (also Material Science and Engineering 285)

Spring. 3 credits.

Lec M W F 11:15-12:05. J. W. Mayer (MS&E), S. Taft (Art), D. Eddy (Univ. Libraries).

This course will be based primarily on the analysis of paintings and rare books and the physical concepts underlying modern analytical techniques. Each week a work of art will be described to include the historical and technical aspects of its creation and its modern analysis. Visual, infrared, and X-ray examination provide insight into the physical properties. Pigments are identified by the radiation emitted in electronic transitions. The ratio of isotopes can be used to identify the geographical origin of a particular pigment as well as to date the pigment. Examples will also be given of authentication and conservation.

### 201 Why the Sky Is Blue: Aspects of the Physical World

Fall. 3 credits.

Lec, T R 2:55-4:10; rec, W 3:35-4:25.  
A. Sadoff.

This is a descriptive physics course aimed specifically at the non-science student. There is an emphasis on the ideas of modern physics where the approach is both historical and thematic. The methodology of science and the nature of evidence is emphasized. An overriding theme is the character of physical laws as shown through the great principles of symmetry and conservation. While there are a few computational problems assigned, the purpose is to help students to understand the concepts rather than to master problem-solving techniques.

### 203 The Physics of Space Exploration and of Astronomy

Spring. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school mathematics.

Lec, M W F 2:30; disc, W 3:35.  
E. E. Salpeter.

The principles of physics (plus simple mathematics) are applied to gain knowledge about planets, stars, galaxies, and the universe.

### 204 Physics of Musical Sound

Spring. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra.

Lec, M W F 2:30; disc, T 3:35. E. Cassel. Many features of the production, propagation, and perception of musical sound may be understood in terms of important concepts in physics. Topics covered will include the mechanism of tone production in musical instruments, distinctions in tone quality, musical scales and tuning, basic principles of room acoustics and reproduction of sound, and some aspects of the mechanism of hearing. There will be some lab activities using computers to sample the frequency spectrum of various sounds and wave forms and to generate very simple sounds. Familiarity with computers is not expected. At the level of *The Science of Sound*, by T. D. Rossing.

### [205 Reasoning about Luck

Fall. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra. Not offered 1990-91.

Lecs, M W F 2:30; 5. 1-hr. labs to be arranged. V. Ambegaokar.

An attempt to explain how and when natural scientists can cope rationally with chance. The first part of the course deals in a constructive way with the basic ideas of probability theory and explains why it is that in large systems likely events can become overwhelmingly likely. An introduction to mechanics and to heat as probabilistic mechanics follows. In this way, interested students are given a nontrivial understanding of the second law of thermodynamics, that putative bridge between C. P. Snow's two cultures. Another physical theory, quantum mechanics, in which chance occurs—though in a somewhat mysterious way—is touched on. Approximately five self-paced laboratory experiments will be included.]

### [206 War and Peace in the Nuclear Age

Spring. 4 credits. Intended for nonscientists; does not serve as a prerequisite to further science courses. Assumes no scientific background but will use high school mathematics. Not offered 1990-91.

Lecs, T R 12:20-1:35; 1 rec each week.  
P. Stein.

This course is intended for any student who wishes to understand the following: the developments in 20th-century physics that culminated in the development of the "atomic" bomb; the principles, types, and effects of nuclear weapons; existing and proposed arsenals and delivery systems; the evolution and present state of the nuclear military strategy of the nuclear powers; and the history of, and current issues in, nuclear arms-control negotiations. The course will also examine important concepts involved in military strategy and arms control. Some attention will also be given to the moral and ethical questions involved. Assignments emphasize development of quantitative reasoning skills as well as knowledgeability about technical aspects of the subject matter.]

### 207-208 Fundamentals of Physics

207, fall; 208, spring. 4 credits each term. Prerequisites for Physics 207: high school physics plus coregistration in Mathematics 112 or 192, or substantial previous contact with introductory calculus, combined with coregistration in a math course approved by instructor. Prerequisites for Physics 208:



Physics 207 (or 112 or 101) and at least coregistration in Mathematics 192 or 112. Physics 207–208 is a two-semester introduction to physics intended for students majoring in a physical science, mathematics, or an analytically oriented biological science.

Lecs, M W F 9:05 or 11:15; 2 recs each week; one 3-hr. lab alternate weeks. Evening exams: fall, Oct. 16, Nov. 15; spring, Feb. 28, Apr. 11. Fall, P. Stein; spring, R. O. Pohl.

207: mechanics, Newton's laws, conservation laws, waves, and selected topics from gravitation, thermodynamics, fluid mechanics, and acoustics.

208: electricity and magnetism, circuits, and introduction to physical and geometric optics. At the level of *College Physics*, by Tipler.

### 213 Physics II: Electricity and Magnetism

Fall or spring (also normally offered in summer). 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisites: Physics 112 and coregistration in the continuation of the mathematics sequence required for 112.

Lecs, T R 9:05 or 11:15; 2 recs each week; one 3-hr. lab alternate weeks. Evening exams: fall, Oct. 4, Nov. 8; spring, Feb. 19, Mar. 14, Apr. 16. Fall, R. Galik; spring, J. Orear.

Electrostatics, behavior of matter in electric fields, magnetic fields, Faraday's law, Maxwell's equations, electromagnetic oscillations and waves, relativity. At the level of *Fundamentals of Physics*, extended version, by Halliday and Resnick. Laboratory covers electrical measurements, DC and AC circuits, resonance phenomena.

### 214 Physics III: Optics, Waves, and Particles

Fall or spring (also normally offered in summer). 3 or 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisites: Physics 213 and coregistration in the continuation of the mathematics sequence required for 112. (Physics 310 may be taken, with permission of the instructor, in place of the Physics 214 lab; credit for 214 is then reduced to 3 credits.)

Lecs, T R 9:05 or 11:15; 2 recs each week; one 3-hr. lab alternate weeks. Evening exams: fall, Oct. 4, Nov. 8; spring, Feb. 19, Mar. 28, Apr. 25. Fall, G. P. Lepage; spring, D. F. Holcomb.

Physics of wave phenomena, electromagnetic waves, interference and diffraction effects, optics, wave properties of particles, introduction to quantum physics. At the level of *Fundamentals of Physics*, extended version, 3rd edition, by Halliday and Resnick, or *Physics for Scientists and Engineers* (with *Modern Physics*), by D. Giancoli.

### 217 Physics II: Electricity and Magnetism

Fall or spring. 4 credits. Enrollment may be limited. Intended for students who have done very well in Physics 112 or 116 and in mathematics and who desire a more analytic treatment than that of Physics 213. Prospective physics majors are encouraged to select Physics 217. Prerequisites: approval of student's adviser and permission from the instructor. A placement quiz may be given early in the semester, permitting those students who find Physics 217 too abstract or analytical to transfer into Physics 213, which they can do without difficulty at that time. Vector calculus

will be taught in this course, but previous contact, especially with the operations grad, div, and curl, is helpful.

Lecs, M W F 10:10, one rec each week; one 3-hr. lab alternate weeks. Evening exams may be scheduled. Fall, R. Lovelace; spring, A. Sievers.

At the level of *Electricity and Magnetism*, by Purcell (Vol. 2, Berkeley Physics Series).

### 218 Physics III: Optics, Waves, and Particles

Fall or spring. 3 or 4 credits. Enrollment may be limited. A special section of Physics 214. Conditions governing enrollment are similar to those of Physics 217.

Lecs, M W F 11:15, one rec each week; one 3-hr. lab alternate weeks. (Physics 310 may be taken, with permission of the instructor, in place of the regular lab, and credit for 218 is reduced to 3 credits.) Fall, R. C. Richardson; spring, D. L. Rubin.

Topics covered in recent years have included oscillators, mechanical waves, waves at interfaces, standing waves, electromagnetic waves, guided waves, scattering, interference and diffraction, geometric optics, the doppler effect, and an introduction to matter waves. Evening exams may be scheduled. A more rigorous version of Physics 214.

### 310 Intermediate Experimental Physics

Fall or spring. 3 credits. Enrollment may be limited. Prerequisite: Physics 208 or 213. (May be taken concurrently with Physics 214 or 218 in place of the regular lab work offered in those courses, with permission of student's adviser.)

Labs, T W 1:25–4:25. Fall, E. Cassel; spring, R. Galik.

Students select from a variety of experiments. An individual, independent approach is encouraged. Facilities of the Physics 410 lab are available for some experiments.

### 315 Phenomena of Microphysics

Fall or spring. 4 credits. Primarily for students of engineering and prospective majors in physics. Prerequisites: Physics 214 and Mathematics 294.

Lecs, M W F 9:05, one rec each week. Fall, V. Elser; spring, J. Alexander.

Introduction to the physics of atoms, solids, nuclei, and elementary particles, emphasizing the description of phenomena using the results of elementary quantum and statistical physics. At the level of *Quantum Physics of Atoms, Molecules, Solids, Nuclei and Particles*, by Eisberg and Resnick.

### 318 Analytical Mechanics

Spring. 4 credits. Prerequisites: Physics 208 or 214 plus one of Mathematics 421, 422 or 423, or permission of instructor. Intended for physics majors concentrating in physics. Similar material is covered in Physics 431 at a less demanding analytical level. (Applied and Engineering Physics 333 is approximately equivalent to Physics 318.)

Lecs, M W F 10:10, F 2:30. J. Sethna.

Newtonian mechanics of particles and systems of particles, including rigid bodies; oscillating systems; gravitation and planetary motion; moving coordinate systems; Euler's equations; Lagrange's equations; Hamilton's equations; normal modes and small vibrations. At the level of *Classical Mechanics*, by Goldstein.

### 325 Electricity and Magnetism

Fall. 4 credits. Prerequisites: Physics 214 plus coregistration in one of Mathematics 421, 422, or 423, or permission of instructor. Intended for physics majors concentrating in physics. Similar material is covered in Physics 432 at a less demanding analytical level.

Lecs, M W F 11:15, F 2:30.

S. A. Teukolsky.

Electrostatics: electric charge and fields, potential, multipoles, conductors, Laplace equation and formal solutions, field energy, dielectric materials, polarization. Magnetostatics: currents, magnetic fields and vector potential, dipoles, magnetic materials, field energy. Maxwell's equations. Special relativity. At the level of *Introduction to Electro-dynamics*, by Griffiths.

### 326 Electromagnetic Waves and Physical Optics

Spring. 4 credits. Prerequisite: Physics 325.

Lecs, M W F 11:15, R 2:30. L. N. Hand.

Electrodynamics: applications of Maxwell's equations, propagation in various media, radiation, relativistic electrodynamics, transmission lines and wave guides, interference and diffraction phenomena. At the level of *Classical Electromagnetic Radiation*, by Marion and Heald.

### 330 Modern Experimental Optics

Fall or spring. 4 credits. Enrollment limited. Prerequisite: Physics 214 or equivalent.

Lec, M 2:30; lab, T R 1:25–4:15. Fall, R. Silsbee; spring, D. M. Lee.

A practical laboratory course in basic and modern optics. Students spend two-thirds of the course experimenting with the physics of basic optical phenomena: interference, diffraction, coherence, polarization, and image formation. The last part of the course involves a choice among experiments on lasers and applications of lasers, light pulses and optical communication, and holography. The course also serves as an introduction to the use of optical equipment and techniques that are employed in current research in the fields of biology, chemistry, physics, and astronomy.

### 341 Thermodynamics and Statistical Physics

Fall. 4 credits. Prerequisites: Physics 214 and Mathematics 294.

Lecs, T R 9:05–9:55, F 10:10–11, T 2:30. J. M. Parpia.

Statistical physics, developing both thermodynamics and statistical mechanics simultaneously. Concepts of temperature, laws of thermodynamics, entropy, thermodynamic relations, free energy. Applications to phase equilibrium, multicomponent systems, chemical reactions, and thermodynamic cycles. Application of statistical mechanics to physical systems; introduction to treatment of Maxwell-Boltzmann, Bose-Einstein, and Fermi-Dirac statistics with applications. Elementary transport theory. At the level of *Fundamentals of Statistical and Thermal Physics*, by Reif, or *Thermal Physics*, by Morse.

**360 Electronic Circuits (also Applied and Engineering Physics 363)**

Fall or spring. 4 credits. Prerequisite: Physics 208 or 213 or permission of instructor. No previous experience with electronic circuits is assumed; however, the course moves through the introductory topics (DC and AC circuits, basic circuit elements) rather quickly. Students wishing a more complete background might consider taking Electrical Engineering 210 before Physics 360. Fall term is usually less crowded.

Lec, M 2:30–4:25; labs, T R or W F 1:25–4:25. Fall, E. Kirkland; spring, R. Thorne.

An experimental survey of some devices and circuits in two general areas: analog and digital electronics. In analog circuits, the major emphasis is on operational amplifiers and bipolar transistors, and their applications. Simple filters, diodes, and field-effect transistors are covered briefly. In digital circuits, some time is spent on combinatorial logic devices. This experience is then applied to problems in programming and interfacing a simple microcomputer.

**400 Informal Advanced Laboratory**

Fall or spring; (may also be offered during summer). Variable credit. Prerequisites: two years of physics and permission of instructor. Lab, see Physics 410.

Experiments of widely varying difficulty in one or more areas, as listed under Physics 410, may be done to fill the student's special requirements.

**410 Advanced Experimental Physics**

Fall or spring. 4 credits. Limited to seniors except by special permission. Prerequisites: Physics 214 (or 310 or 360) plus 318 and 325, or permission of instructor.

Lec, M 2:30–4:25; labs, T W 1:25–4:25.

Fall, R. Siemann; spring, D. L. Hartill.

Selected topics in experimental concepts and techniques. About seventy different experiments are available in acoustics, optics, spectroscopy, electrical circuits, electronics and ionics, magnetic resonance, X-rays, low temperature, solid state, cosmic rays, nuclear physics. The student performs three to six diverse experiments, depending on difficulty, selected to meet individual needs and interests. Independent work is stressed.

**431–432 Introductory Theoretical Physics I and II**

431, fall; 432, spring. 4 credits each term. Prerequisites: Physics 431: Physics 207–208 or equivalent and Mathematics 294 or equivalent. Physics 432: Physics 431 or equivalent. (Mathematics 421 is recommended.) Primarily for physics majors with concentrations outside physics and for graduate students in a science other than physics (such as chemistry, engineering, biology, geology). Physics 318 and 325 cover similar material at a higher analytical level and are intended for physics majors concentrating in physics.

Lecs, M W F 10:10 and F 1:25. Fall, D. M. Lee; spring, R. M. Cotts.

431: Mechanics. Includes Newtonian mechanics, Lagrange's and Hamilton's equations, central forces, rigid-body motion, and small oscillations. At the level of *Mechanics*, by Symon. 432: Electricity and magnetism. Includes electrostatics, magnetostatics, boundary value problems, dielectric and magnetic media. Maxwell's equations and electromagnetic waves, introduction to special relativity. At the level of *Introduction to Electrodynamics*, by Griffiths.

**443 Introductory Quantum Mechanics**

Fall. 4 credits. Prerequisites: Physics 318 and 325, or 431–432; Physics 315 and Mathematics 421; or permission of instructor.

Lecs, M W F 9:05, F 2:30. Evening exams may be scheduled. A. J. Sievers.

Introduction to concepts and techniques of quantum mechanics, at the level of *Introduction to Quantum Mechanics*, by Dicke and Wittke.

**444 Nuclear and High-Energy Particle Physics**

Spring. 4 credits. Prerequisite: Physics 443 or permission of instructor.

Lecs, M W F 9:05, F 1:25. P. Drell.

Behavior of high-energy particles and radiation; elementary particles; basic properties of accelerators and detectors; general symmetries and conservation laws. At the level of *Concepts of Particle Physics*, by Gottfried and Weisskopf.

**454 Introductory Solid-State Physics**

Fall or spring. 4 credits. Prerequisite: Physics 443 or Chemistry 793, or permission of instructor.

Lecs, fall, M W F 10:10, W 3:35, spring, T R 10:10–11:25, R 3:35.

An introduction to modern solid-state physics, including lattice structure, lattice vibrations, thermal properties, electron theory of metals and semiconductors, magnetic properties, and superconductivity. At the level of *Introduction to Solid State Physics*, by Kittel (fall term), and *Solid State Physics*, by Ashcroft and Mermin (spring term).

**480–489 Special Topics Seminar**

Spring. 2 and 3 credits. Limited to senior physics majors and those who receive permission of instructor. S-U grades only.

Hours to be arranged. One selected topic of current interest is studied. Students participate in organization and presentation of material.

**480 Computational Physics**

Spring. 3 credits, S-U only. Prerequisites: Math 421–423 or equivalent, and the ability to write programs in any computer language. No previous knowledge of numerical analysis is assumed.

Lec T R 10:10–11:35. S. Teukolsky.

Course content is essentially identical to Physics 680, but a different grading system will be used for undergraduates.

**490 Independent Study in Physics**

Fall or spring. 1–3 credits. Ordinarily limited to seniors. Prerequisite: permission of professor who will direct proposed work. Copy of request for independent study form must be filed with physics department course coordinator. Individual project work (reading or laboratory) in any branch of physics.

**500 Informal Graduate Laboratory**

Fall, spring, or summer. Variable credit.

**510 Advanced Experimental Physics**

Fall, spring, or summer. 3 credits.

Labs, T W 1:25–4:25. Fall, R. H. Siemann; spring, D. L. Hartill.

About seventy different experiments are available in acoustics, optics, spectroscopy, electrical circuits, electronics and ionics, magnetic resonance, X-rays, low temperature, solid state, cosmic rays, nuclear physics. Students perform four to eight experiments selected to meet individual needs. Independent work is stressed.

**520 Projects in Experimental Physics**

Fall, spring, or summer. 1–3 credits. To be supervised by faculty member. Students must advise department course coordinator of faculty member responsible for their project. Prerequisite: Physics 510.

Projects of modern topical interest that involve some independent development work by student. Opportunity for more initiative in experimental work than is possible in Physics 510.

**[525 Physics of Black Holes, White Dwarfs, and Neutron Stars (also Astronomy 511, High-Energy Astrophysics)]**

Fall. 4 credits. Not offered 1990–91.

Lecs, T R 1:25–2:40. S. L. Shapiro.

The formation of compact objects: neutrino and gravitational radiation from supernova collapse and neutron stars. Equilibrium configurations, equations of state, stability criteria, and mass limits. The influence of rotation and magnetic fields. Pulsar phenomena. Mass flow in binary systems; spherical and disk accretion; high-temperature radiation processes. Compact X-ray sources and X-ray bursts. Emphasis will be on the application of fundamental physical principles to compact objects. Topics in diverse areas of physics will be discussed: solid-state physics, nuclear physics, relativity, fluid dynamics, high-energy physics, etc. No astronomy or general relativity prerequisites. Text: *Physics of Black Holes, White Dwarfs, and Neutron Stars*, by Shapiro and Teukolsky.]

**551 Classical Mechanics**

Fall. 3 credits. Prerequisite: an undergraduate course in classical mechanics at the level of books by K. Symon or J. B. Marion.

Lecs, T R 10:10, R 2:30. E. D. Siggia.

Lagrangian and Hamiltonian formulation of classical mechanics, with modern applications in nonlinear dynamics. Foundations will be taught at the level of *Mechanics*, by Landau and Lifshitz.

**553–554 General Relativity (also Astronomy 509–510)**

553, fall; 554, spring. 4 credits. Prerequisite: knowledge of special relativity at the level of *Classical Mechanics*, by Goldstein. Offered alternate years.

Lecs, T R 1:25–2:40. S. L. Shapiro.

Physics 553 is a systematic introduction to Einstein's theory, with emphasis on modern coordinate-free methods of computation. Topics include review of special relativity, modern differential geometry, foundations of general relativity, laws of physics in the presence of a gravitational field, experimental tests of gravitation theories. At the level of *Gravitation*, by Misner. Physics 554 is a continuation of 553 that emphasizes applications to astrophysics and cosmology. Topics include relativistic stars, gravitational collapse and black holes, gravitational waves, cosmology.

**561 Classical Electrodynamics**

Fall. 3 credits.

Lecs, T R 8:30–9:55, one sec per week. D. R. Yennie.

Maxwell's equations, electromagnetic potentials, electrodynamics of continuous media (selected topics), special relativity, radiation theory. At the level of *Classical Electrodynamics*, by Jackson.

**562 Statistical Mechanics**

Spring. 4 credits. Primarily for graduate students. Prerequisites: a good knowledge of quantum mechanics (at the level of Merzbacher), classical mechanics (at the level of Marion), and statistical mechanics (at the level of Rief).

Lecs, T R 8:30–9:55. N. W. Ashcroft. Thermodynamic functions, equations of state; Second Law phase equilibria; thermodynamic inequalities; kinetic theory, Boltzmann's equation, transport theory. Microstates, ensembles, partition functions, and phase-space averaging. Chemical equilibria. Quantum statistical mechanics, Fermi-Dirac and Bose-Einstein distributions; application to Bose and Fermi systems. Fundamentals of statistical mechanics: density matrix, reduced distribution, Wigner function, correlation functions and fluctuations. Advanced topics include Ising model, lattice gases, and spin systems; and introduction to critical phenomena. At the level of *Statistical Mechanics*, by Huang, and *Statistical Mechanics*, by Pathria.

**572 Quantum Mechanics I**

Fall or spring. 4 credits.

Lecs, fall, M W F 9:05, T-M. Yan; spring, M W F 11:15. D. Cassel.

The formulation of quantum mechanics in terms of states and operators. Symmetries and the theory of angular momentum. Stationary and time-dependent perturbation theory. Fermi's golden rule and variational methods. The elements of scattering theory. At a level between *Quantum Mechanics*, by Merzbacher, and *Quantum Mechanics*, by Landau and Lifshitz. Familiarity with elementary aspects of the Schrodinger equation is assumed, including its application to simple systems such as the hydrogen atom.

**574 Quantum Mechanics II**

Fall or spring. 4 credits. Required of all Ph.D. majors in theoretical physics.

Lecs, fall, M W F 9:05; spring, M W F 11:15. Fall, H. Tye; spring, G. P. Lepage. Discussion of various applications of quantum mechanics, such as collision theory, theory of spectra of atoms and molecules, theory of solids, second quantization, emission of radiation, relativistic quantum mechanics. At the level of *Lectures on Quantum Mechanics*, by Gordon Baym.

**635 Solid-State Physics I**

Fall. 3 credits. First semester of a two-semester sequence of solid-state physics for graduate students who have had the equivalent of Physics 572 and 562 and some prior exposure to solid-state physics, such as Physics 454.

Lecs, T R 11:40–12:55. C. P. Franck. A survey of the basic phenomenological knowledge of condensed matter physics, mainly dealing with solids. Probable topics include equilibrium properties such as structure and phase transitions as well as transport phenomena such as electrical and thermal conductivity. Discussions at the level of *Solid State Physics*, by N. W. Ashcroft and N. D. Mermin.

**636 Solid-State Physics II**

Spring. 3 credits.

Lecs, T R 11:40–12:55. C. Henley. Much in condensed matter physics is not covered in Ashcroft and Mermin or included in Physics 635. Topics will be chosen from: broken symmetries, elementary excitations, and topological defects; critical phenomena, the onset of chaos, and the renormalization group; first order phase transitions, nucleation,

and dendritic growth; broken gauge symmetries, superconductors and superfluids, the fractional quantum Hall effect; disordered systems, spin glasses, localization, and percolation theory.

**645 High-Energy Particle Physics**

Fall. 3 credits.

Lecs, M W F 11:15. K. Gottfried. Introduction to the physics of baryons, mesons, and leptons. Strong, electromagnetic, and weak interactions. Relevance of symmetry laws to particle physics. Introduction to the quark model. Unification of weak and electromagnetic interactions. At the level of *Introduction to High Energy Physics*, by Perkins.

**646 High-Energy Particle Physics**

Spring. 3 credits.

Lecs, T R 2:55–4:10. K. Berkelman. Topics of current interest, such as high-energy electron and neutrino interactions, electron positron annihilation, and high-energy hadronic reactions, are surveyed. Lectures and reading material are at the level of *Introduction to High Energy Physics*, by Perkins.

Note: Only S-U grades will be given in courses numbered 650 or above.

**651 Relativistic Quantum Field Theory I**

Fall. 3 credits. S-U grades only.

Lecs, M W F 10:10. T. Kinoshita. Introduction to relativistic field theories, with emphasis on applications to quantum electrodynamics. Topics to be covered include canonical field quantization, perturbation theory, calculation of cross sections for elementary processes, renormalization, and applications to non-electromagnetic interactions.

**652 Relativistic Quantum Field Theory II**

Spring. 3 credits. S-U grades only.

Lecs, T R 10:10–11:35. B. Greene. This course is a continuation of Physics 651 and introduces more advanced methods and concepts in quantum field theory. Topics include functional integral methods, quantization of non-abelian gauge theories, the renormalization group, dispersion relations, and spontaneous symmetry breaking. Applications to the electroweak theory and quantum chromodynamics are emphasized.

**653 Statistical Physics**

Fall. 3 credits. Normally taken by graduate students in their second or later years. Prerequisites: competence in the basic principles of quantum mechanics, statistical mechanics, and thermodynamics. S-U grades only.

Lecs, T R 8:30–9:55. M. Nelkin. Survey of topics in modern statistical physics, including the theory of simple classical and quantum fluids; the theory of ordered systems such as superfluids and superconductors; kinetic theory and the Boltzmann equation; phenomenological Fermi liquid theory and hydrodynamics; theories of inhomogeneous systems; scaling theories and phase transitions. The contents of the course vary with the current interests of the instructor.

**654 Theory of Many-Particle Systems**

Spring. 3 credits. Prerequisites: Physics 562, 574, 635, 636, and 653. S-U grades only.

Lecs, W F 2:30–4. E. D. Siggia. Equilibrium and transport properties of microscopic systems of many particles studied at zero and finite temperatures. Thermodynamic Green's function techniques introduced

and applied to such topics as normal and superconducting. Fermi systems, superfluidity, magnetism, insulating crystals.

**661 Advanced Topics in High Energy Particle Theory**

Fall. 3 credits. Prerequisites: Physics 652. S-U grades only.

Lecs, M W F 10:10. A. LeClair. This course will present advanced topics of current research interest. Subject matter will vary from year to year. Some likely topics are two-dimensional conformal field theory with applications to string theory and condensed matter physics, applications of the electroweak theory, lattice gauge theory, mathematical methods (e.g. group theory), perturbative quantum chromodynamics, anomalies and geometry, current algebra, and phenomenological issues beyond the standard model.

**[665 Topics in Theoretical Astrophysics (also Astronomy 555)]**

Fall. 4 credits. S-U grades only. Not offered 1990–91.

Lecs, M W F 2:30. E. E. Salpeter. Usually concentrates on the theory of the interstellar medium. At the level of Spitzer's *The Physical Processes in the Interstellar Medium*.

**[667 Theory of Stellar Structure and Evolution (also Astronomy 560)]**

Fall. 4 credits. S-U grades only. Not offered 1990–91.

Lec, M W F 1:25. E. E. Salpeter. Summary of observational facts on stars; dimensional analysis; nuclear reactions and energy, transport in stellar interiors; models for static and evolving stars. At the level of *Principles of Stellar Energy and Nucleosynthesis*, by Clayton.]

**680–689 Special Topics**

Offerings are announced each term. Typical topics are group theory, analyticity in particle physics, weak interactions, superfluids, stellar evolution, plasma physics, cosmic rays, general relativity, low-temperature physics, X-ray spectroscopy or diffraction, magnetic resonance, phase transitions, and the renormalization group.

**680 Computational Physics**

Spring. 3 credits. S-U only. Prerequisites: The course assumes a good background in the standard "mathematical methods for physics," and the ability to write programs in any computer language. No previous knowledge of numerical analysis is assumed.

Lecs T R 10:10–11:35. S. Teukolsky. A course designed to familiarize students with numerical techniques for solving diverse problems in physics and related fields. The problems will be drawn from many different branches of physics, but the emphasis will be on common techniques of solution. Numerical techniques discussed in the course will include ordinary and partial differential equations, linear algebra and eigenvalue problems, Monte Carlo techniques, solving nonlinear equations, fast Fourier transforms, etc. In contrast to traditional numerical analysis courses, the flavor of the course will be "how-to," rather than theoretical. No theorems will be proved. Students will be expected to solve, both individually and in small teams, assigned numerical exercises. Text: *Numerical Recipes: The Art of Scientific Computing*, by Press, Flannery, Teukolsky, and Vetterling.

**690 Independent Study in Physics**

Fall or spring. Variable credit. Students must advise department course coordinator of faculty member responsible for their project. S-U grades only. Special graduate study in some branch of physics, either theoretical or experimental, under the direction of any professional member of the staff.

**PORTUGUESE**

See Modern Languages and Linguistics.

**PSYCHOLOGY**

D. Bem, S. Bem, E. M. Blass, U. Bronfenbrenner, W. Collins, J. Cutting, R. Darlington, T. DeVogd, D. Dunning, H. M. Feinstein, D. Field, B. L. Finlay, E. J. Gibson, T. D. Gilovich, B. P. Halpern, A. M. Isen, R. E. Johnston, F. Keil, K. Keil, C. Krumhansl, H. S. Kurtzman, W. W. Lambert, H. Levin, D. Levitsky, J. B. Maas, R. D. Mack, H. Porte, D. T. Regan, E. A. Regan, T. A. Ryan, E. Spelke, B. Strupp

The major areas of psychology represented in the department are human experimental psychology, biopsychology, and personality and social psychology. These areas are very broadly defined, and the courses are quite diverse. Biopsychology includes such things as animal learning, neuropsychology, interactions between hormones, other biochemical processes, and behavior. Human experimental psychology includes such courses as cognition, perception, memory, and psycholinguistics. Personality and social psychology is represented by courses and fieldwork in psychopathology as well as courses in social psychology and personality (such as theories of personality, beliefs and attitudes, and sex roles). In addition to the three major areas mentioned above, the department also emphasizes the statistical and logical analysis of psychological data and problems.

**The Major**

Prerequisites for admission to the major are:

- 1) any three courses in psychology (students often begin with Psychology 101);
- 2) no grade below C+ in any psychology course; and
- 3) acceptance by the Majors and Advising Committee of the Department of Psychology.

Application forms may be obtained at the department office and should be filed two weeks before the pre-course enrollment period.

Requirements for the major are:

- 1) a total of 40 credits in psychology (including prerequisites), from which students majoring in psychology are expected to choose, in consultation with their advisers, a range of courses that covers the basic processes in psychology (laboratory and/or field experience is recommended); and
- 2) demonstration of proficiency in statistics before the beginning of the senior year. (See the section below on the statistics requirement.)

Normally it is expected that all undergraduate psychology majors will take at least one course in each of the following three areas of psychology:

- 1) **Human experimental psychology**
- 2) **Biopsychology**
- 3) **Social, personality, and abnormal psychology**

The following classification of Department of Psychology offerings is intended to help students and their advisers choose courses that will ensure that such breadth is achieved.

- 1) **Human experimental psychology:** Psychology 205, 209, 214, 215, 305, 308, 309, 313, 314, 316, 342, 345, 370, 412, 415, 416, 417, 418, 436, 492, 605, 609, 612, 614, 615, 616, 618, 642, 670, 692, 709, 713, 715, 717.
- 2) **Biopsychology:** Psychology 123, 276, 307, 322, 324, 326, 332, 361, 375, 396, 422, 425, 429, 492, 607, 622, 625, 626, 629, 675, 676, 692, 696, 722.
- 3) **Social, personality, and abnormal psychology:** Psychology 255, 265, 275, 277, 280, 325, 327, 328, 329, 379, 383, 389, 402, 404, 426, 450, 467, 468, 469, 481, 482, 488, 489, 491, 650, 689, 691.

The major adviser determines to which group, if any, the following courses may be applied.

- 4) **Other courses:** Psychology 101, 103, 347, 350, 387, 410, 440, 465, 470, 471, 472, 473, 475, 476, 478, 479, 490.

With the permission of the adviser, courses in other departments may be accepted toward the major requirements.

**Fieldwork, independent study, and teaching.**

The department requires students to observe the following limits on fieldwork, independent study, and teaching.

- 1) Undergraduates may not serve as teaching assistants for psychology courses if they are serving as teaching assistants for any other course during the same semester.
- 2) An undergraduate psychology major cannot apply more than 12 of the credits earned in independent study (including honors work) and fieldwork toward the 40 credits required by the major.

**Statistics requirement.** Proficiency in statistics can be demonstrated in any one of the several ways listed below.

- 1) Passing Psychology 350.
- 2) Passing an approved course or course sequence in statistics in some other department at Cornell. The approved list of courses and sequences may change. It has usually included Education 352 and 353, Industrial and Labor Relations 210 and 211, and Sociology 301. Requests that a particular course be added to this list may be made to Professor Gilovich.
- 3) Passing a course or course sequence in statistics at some other college, university, or college-level summer school. The course or sequence must be equivalent to at least 6 semester credits. The description of the course from the college catalog and the title and author of the textbook used must be submitted to Professor Gilovich for approval.

- 4) Passing an exemption examination. This examination can be given at virtually any time during the academic year if the student gives notice at least one week before. Students who have completed a theoretical statistics course in a department of mathematics or engineering and who wish to demonstrate competence in applied statistics usually find this option the easiest. Students planning this option should discuss it in advance with Professor Gilovich.

**Concentration in biopsychology.** Psychology majors interested in psychology as a biological science can elect to specialize in biopsychology. Students in this concentration must meet all of the general requirements for the major in psychology and must also demonstrate a solid background in biology; the physical sciences, including at least introductory chemistry; and mathematics. Students will design with their advisers an integrated program in biopsychology built around courses on physiological, chemical, anatomical, and ecological determinants of human and nonhuman behavior offered by the Department of Psychology. Additional courses in physiology, anatomy, biochemistry, neurochemistry, neurobiology, and behavioral biology may be designated as part of the psychology major after consultation between the student and his or her biopsychology adviser.

**Concentration in personality and social psychology.** This concentration is offered in cooperation with the Department of Sociology. Psychology majors who wish to specialize in social psychology are expected to meet the general requirements set by their department, including statistics. To ensure a solid interdisciplinary grounding, students in the concentration will be permitted to include some major courses in sociology and related fields. Advisers will assist students in the selection of a coherent set of courses from social organization, cultural anthropology, experimental psychology, social methodology, and several aspects of personality and social psychology. Seniors in the concentration may elect advanced and graduate seminars, with the permission of the instructor.

**Undergraduate honors program.** The honors program is designed for those exceptionally able students who wish to pursue an intensive and independent program of research in psychology. Successful participation in this program serves as evidence of the student's facility in the two most important skills of an academic psychologist: the capacity to acquire and integrate a substantial body of theoretical and factual material and the ability to engage in creative research activity. All qualified students planning on a graduate education in psychology or other academic fields should consider the honors program seriously. The program offers most students the closest contact and consultation with faculty that they will receive during their time at Cornell.

The core of the honors program is a research project that the student carries out in close collaboration with a faculty member in the field of psychology. It is assumed that most students will do so while enrolled in Psychology 470 (Undergraduate Research in Psychology). A written report of the research is to be given to the chair of the honors committee (currently Professor Dunning) toward the end of the last semester of the student's senior year.



An oral defense of the thesis is then given before a committee of three faculty members, and the student presents his or her work in a public forum. Final honors standing (summa cum laude, magna cum laude, cum laude) is indicated on the student's diploma. The T. A. Ryan Award, accompanied by a cash prize, is awarded to the student who conducts the best honors project in a given year.

A student may formally apply to the honors program at any time during the senior year provided that she or he is actively engaged in independent research. However, students must do so by the second week of November. Applications should be given to Professor Dunning and should be made directly by the student.

### Distribution Requirement

The distribution requirement in the social sciences is satisfied by any two courses in psychology with the exception of Psychology 123, 276, 307, 322, 324, 326, 332, 350, 361, 396, 422, 425, 429, 451, 471, 472, 473, 475, 476, 479, 492, 607, 622, 625, 626, 629, 676, 696, and 722.

### Courses

#### 101 Introduction to Psychology: The Frontiers of Psychological Inquiry

Fall. 3 credits. Students may not receive credit for both Psychology 101 and Education 110. Students who would like to take a discussion seminar should also enroll in Psychology 103.

M W F 10:10. J. B. Maas. Prelims: 7:30 p.m., Oct. 1, Nov. 5.

The study of human behavior. Topics include brain functioning and mind control, psychophysiology of sleep and dreaming, psychological testing, perception, learning, cognition, memory, language, motivation, personality, abnormal behavior, psychotherapy, social psychology, and other aspects of applied psychology. Emphasis is on developing skills to critically evaluate claims made about human behavior.

#### 103 Introductory Psychology Seminars

Fall. 1 credit. Limited to 400 students.

Prerequisite: concurrent enrollment in Psychology 101.

Hours to be arranged; 32 different time options. Staff.

A weekly seminar that may be taken in addition to Psychology 101 to provide an in-depth exploration of selected areas in the field of psychology. Involves extensive discussion and a term paper related to the seminar topic. Choice of seminar topics and meeting times will be available at the second lecture of Psychology 101.

#### 109 Freshman Writing Seminar: The Science of Dreaming Sleep

Fall. 3 credits. Prerequisite: AP biology and chemistry. Limited to 17 students.

T R 11:40–12:55. H. Porte.

This is a course in the *science* of dreaming sleep. Topics will include the phenomenology and neurobiology of rapid eye movement ("paradoxical") sleep; the REM sleep disorder, narcolepsy; the sense and nonsense of dreams; the problems of dream theory and dream interpretation; animals and people who act out their dreams.

#### 123 Introduction to Biopsychology

Fall. 3 credits. May not be taken for credit by students who are registered in or have completed one or more courses offered by the Section of Neurobiology and Behavior of the Division of Biological Sciences or two or more biopsychology courses.

M W F 10:10. E. A. Regan.

The biology of behavior, including both evolutionary and physiological approaches to behavior. Human behavior is discussed whenever possible, but there is also extensive discussion of the behavior of nonhuman species. Specific topics include the structure, function, and development of the nervous system, stress and disease, sleep, genetic and chemical models of mental disorder, and hormones and sexual behavior; biological bases of learning, cognition, communication, and language; and the ecology and evolution of social organization and social development.

#### Introductory courses in cognitive psychology.

Each of the following four courses (205, 209, 214, 215) provides an introduction to a major area of study within cognitive psychology. These courses are independent of one another, and none has any prerequisites. Students may take any one of the courses or any combination of them (including all four). Courses may be taken in any order or simultaneously.

#### 205 Perception

Spring. 3 credits. Open to first-year students. Graduate students, see Psychology 605.

T R 2:55–4:10. J. Cutting.

One of four introductory courses in cognitive psychology. Basic perceptual concepts and phenomena are discussed with emphasis on stimulus variables and sensory mechanisms. All sensory modalities are considered. Visual and auditory perception are discussed in detail.

#### 209 Developmental Psychology

Spring. 4 credits. Graduate students, see Psychology 709.

T R 1:25–2:40; sec to be arranged.

E. Spelke.

One of four introductory courses in cognitive psychology. A comprehensive introduction to current thinking and research in developmental psychology. The course focuses on development of action, development of perception and knowledge, and development of language, morality, and other aspects of human culture.

#### 214 Knowledge and Reasoning

Spring. 3 credits. Sophomore standing required. Graduate students, see Psychology 614.

M W F 1:25. C. Krumhansl.

One of four introductory courses in cognitive psychology. A survey of the following topics: visual and auditory memory, imagery, attention, memory for language, reasoning, decision making, and intelligence.

#### 215 Psycholinguistics

Fall. 3 or 4 credits (4-credit option involves term paper). Graduate students, see Psychology 715.

M W F 11:15. H. S. Kurtzman.

One of four introductory courses in cognitive psychology. Introduction to the psychological study of language. Covers basic linguistic theory and contemporary research into language comprehension, production, and acquisition.

#### 255 Psychology and Medicine

Fall. 3 credits. Prerequisite: Psychology 101. Limited to 40 students. Sophomores and juniors.

T R 11:40–12:55. H. Levin.

This course treats the implications of psychological theory and research for selected contemporary issues in medicine. The topics to be covered include: who are the people who choose medicine as a profession—family background, political and social beliefs. Profiles of various medical specialties (e.g., pediatrics, psychiatry, radiology, surgery). Satisfactions and frustrations in a medical career. Communication between doctors and patients. Diagnosis as decision making with incomplete information. The use of expert systems in medicine. Attitude and behavior change as related to drugs, smoking, and obesity. Psychoneuroimmunology. The relations of personality to heart disease and longevity. This course will not concern psychopathology.

#### 265 Psychology and Law

Fall. 3 credits. Prerequisite: Psychology 101.

M W F 1:25. D. Dunning.

This course examines the implications of psychological theory and methods for law and the criminal justice system. We concentrate on psychological research on legal topics (e.g., confession, eyewitness testimony, jury decision making, homicide, aggression, the prison system), social issues (e.g., death penalty, affirmative action), as well as on psychologists as participants in the legal system (e.g., assessing insanity and dangerousness and for expert testimony).

#### 275 Introduction to Personality Psychology

Fall. 3 credits. Prerequisite: an introductory psychology course.

T R 10:10–11:25. D. Bem.

An introduction to research and theory in personality psychology, emphasizing contemporary approaches. Topics include the dynamics, structure, and assessment of personality as well as personality development and change. Biological and sociocultural influences on personality are also considered.

#### [276 Motivation (also Nutritional Science 276)]

Spring. 3 credits. Graduate students, see Psychology 676/Nutritional Science 676.

T R 10:10–11:25. E. Blass.

The course surveys traditional and contemporary approaches to motivational behavior from Aristotle to Freud to Skinner to Lorenz. It also draws upon field studies, laboratory analyses, clinical cases and developmental stages to establish a scientific basis for motivation analysis. Normal and pathological feedings will serve as a target behavior.

**277 Psychology of Sex Roles (also Women's Studies 277)**

Spring. 3 credits. Limited to 300 students.  
T R 11:40–12:55. S. Bem.

The course addresses the question of why and how adult women and men come to differ in their overall life styles, work and family roles, personality patterns, cognitive abilities, etc. This broad question is examined from five perspectives: (a) the psychoanalytic perspective, (b) the biological perspective, (c) the historical and cultural evolutionary perspective, (d) the child development perspective, and (e) the social-psychological and contemporaneous perspective. Each of these perspectives is also brought to bear on more specialized phenomena relating to the psychology of sex roles, including psychological androgyny, women's conflict over achievement, the male sex role, equalitarian marriage relationships, gender-liberated child-rearing, female sexuality, homosexuality, and transsexualism.

**280 Introduction to Social Psychology**

Spring. 3 or 4 credits; the additional (or fourth) credit is given for the completion of a group research project and write-up. Prerequisite: an introductory psychology course.

T R 10:10–11:25. D. Bem.

An introduction to research and theory in social psychology. Topics include processing of social information; social influence, persuasion, and attitude change; social interaction and group phenomena. The application of social psychological knowledge to current events will also be discussed.

**[305 Visual Perception]**

Fall. 4 credits. Limited to 20 students.  
Prerequisite: Psychology 205 or permission of instructor. Not offered 1990–91.

M W F 1:25–2:15. J. Cutting.

A detailed examination of theories and processes in visual perception. Topics will include the perception of color, form, and motion; perceptual constancies; adaptation; pattern perception; and photography, television, and film.]

**[307 Chemosensory Perception]**

Fall. 3 or 4 credits; the optional (or fourth) credit is for an independent laboratory project. Registration for the 4-credit option requires permission of the instructor; students will read, analyze, and discuss difficult original literature in the areas covered. Offered alternate years. Not offered 1990–91. Graduate students, see Psychology 607.

T R 9:05. B. P. Halpern.

An examination of basic theory, data, and processes for perception of the chemosensory environment. Topics include psychophysical methods for human and nonhuman studies, stimulus control, chemosensory function and development in neonates, role of chemosensory function in food choices, chemosensory communication, effects of pollution of the chemosensory environment, and possible consequences of chemosensory dysfunctions. At the level of *Clinical Measurement of Taste and Smell*, edited by H. L. Meiselman and R. S. Rivlin, and *Sensory Analysis of Foods*, edited by J. R. Piggott.]

**[308 Perceptual Learning]**

Fall. 3 credits. Prerequisite: Psychology 205, 209, or 305, or permission of instructor. Not offered 1990–91.]

**309 Development of Perception and Representation**

Fall. 3 credits. Prerequisite: Psychology 205, 209, 214, or 305, or permission of instructor. Graduate students, see Psychology 609.

T R 1:25–2:40. E. Spelke.

An introduction to theories and research on the origins and development of knowledge of the immediately surrounding world. The course focuses on knowledge of the world as an arrangement in space and time, knowledge of the world as a space that can be encountered through multiple sensory modes, knowledge of the world as a place that can be acted upon, and organization of the world into meaningful objects and events.

**[313 Perceptual and Cognitive Processes]**

Spring. 4 credits. Prerequisite: Psychology 205 or 214 or permission of instructor. Not offered 1990–91. Graduate students, see Psychology 713.

R 1:25–4:25. Staff.

A critical examination of selected topics in the area of perceptual and higher mental processes. We will read, discuss, and critically analyze original experimental reports and theoretical articles.]

**[314 The Social Psychology of Language]**

Spring. 4 credits. Prerequisite: a course in psycholinguistics or social or personality psychology, or permission of instructor. Not offered 1990–91.

T R 2:55–4:10. Staff.

We are aware that one talks differently to children than to adults, to foreigners than to native speakers, to people we like than to those we detest, to people whose intelligence we respect compared to those we think are idiots. Speech varies by social setting; by the relationships between people; by formality, friendship, affection; and by the purposes of the communication: deception, persuasion, propaganda, etc. What are the rules of social language? How do we acquire the abilities to vary language appropriately and to understand the meanings of such variations?]

**[316 Auditory Perception]**

Spring. 3 or 4 credits; the 4-credit option involves a laboratory project or paper. Prerequisite: Psychology 205, 209, 214, or 215 (other psychology, linguistics, or biology courses could serve as prerequisite with permission of the instructor). Not offered 1990–91.

Lecs, T R 2:30–4:25; lab, hours to be arranged. Staff.

Basic approaches to the perception of auditory information, with special consideration of complex patterns such as speech, music, and environmental sounds.]

**[322 Hormones and Behavior (also Biological Sciences 322)]**

Spring. 3 credits. Limited to juniors and seniors; open to sophomores only by permission. Prerequisites: one year of introductory biology plus a course in psychology or Biological Sciences 221 or 222. S-U grades optional. Offered alternate years. Some years (but by no means all) a 4-credit option is available, which involves a one-hour section once a week, in which students will be expected to participate in discussion and read original papers in the field. This option, if available, is announced the first day of class; all students should preregister for 3 credits only. Not offered 1990–91. Graduate students, see Psychology 722.

T R 10:10–11:30. E. A. Reagan, R. E. Johnston.

The relationship between endocrine and neuroendocrine systems and the behavior of animals, including humans. Major emphasis is on sexual, parental, and aggressive behavior.]

**324 Biopsychology Laboratory (also Biological Sciences 324)**

Fall. 4 credits. Limited to 25 juniors and seniors. Prerequisites: Psychology 123 or Biological Sciences 221 or 222, and permission of instructor. S-U grades optional.

T R 1:25–4:25. T. DeVogd.

Experiments designed to provide research experience in animal behavior (including learning) and its neural and hormonal mechanisms. A variety of techniques, species, and behavior patterns are included.

**325 Introductory Psychopathology**

Fall. 3 credits. Prerequisite: a course in introductory psychology. Students who would like to take a discussion seminar should also enroll in Psychology 329. May be taken concurrently with Psychology 327. Enrollment in Psychology 327 is limited.

T R 1:25–2:40. R. D. Mack.

A survey of the various forms of psychopathology, child and adult, as they relate to the experiences of human growth and development. Presents a description of the major syndromes, investigations, theories of etiology, and approaches to treatment.

**326 Evolution of Human Behavior**

Fall. 4 credits. Prerequisite: Psychology 123, or an introductory biology course, or an introductory anthropology course. Graduate students, see Psychology 626.

T R 2:55–4:10. R. E. Johnston.

A broad comparative approach to the behavior of animals and humans with special emphasis on the evolution of human behavior. Topics covered will vary but will include some of the following: human evolution, evolutionary and sociobiological theory, animal communication, non-verbal communication, language, cognitive capacities, social behavior and organization, cooperation and altruism, sexual behavior, mating and marriage systems, aggression, warfare.

**327 Fieldwork in Psychopathology and the Helping Relationship**

Fall. 2 credits. Prerequisites: Psychology 325 or concurrent registration in 325 and permission of instructor. S-U grades only. Students do not enroll in advance for this course. Field placement assignments are made in Psychology 325 during the first two weeks of the semester. Students who have already taken Psychology 325 must contact the instructor during the first week of the semester. Enrollment is limited by the fieldwork placements available. Fee, \$25.

T R 12:20–1:10. K. Keil.

An introductory fieldwork course for students currently enrolled in, or who have taken, Psychology 325. Fieldwork placements include the school system, psychiatric institutions, halfway houses, and other mental health-oriented facilities. In addition to fieldwork, weekly supervisory/seminar meetings are held to discuss fieldwork issues and assigned readings.

### 328 Continuing Fieldwork in Psychopathology and the Helping Relationship

Fall or spring. 2 credits each term. Prerequisites: Psychology 325, 327, and permission of instructor. S-U grades only. May not be taken more than twice. Students do not enroll in advance for this course. Students in Psychology 327 should inform their teaching assistant before the end of the semester of their desire to take Psychology 328. Students not currently in a field placement who want to take Psychology 328 should contact the instructor during the first week of the semester. Field placement assignments will be made during the first two weeks of the semester. Enrollment is limited by the fieldwork placements available. Fee, \$25.

T R 12:20-1:10. K. Keil and staff.  
Designed to allow students who have begun fieldwork as part of Psychology 327 to continue their field placements under supervision and for academic credit. A limited number of students may be allowed to begin their fieldwork with Psychology 328 but only with permission of the instructor.

### 329 Introductory Psychopathology Seminars

Fall. 1 credit. Limited to 90 students. Prerequisite: must be concurrently enrolled in Psychology 325. Letter grade only.

Hours to be arranged; 9 different time options. Staff.

A weekly seminar/discussion section that may be taken in addition to Psychology 325 to provide an in-depth exploration of selected areas in the field of psychopathology. Topics vary from year to year and may include such areas as depression, schizophrenia, psychotherapy, sex-roles and psychopathology, etc. Involves extensive discussion and several short papers related to the seminar topic. Choice of seminar topics and meeting times will be available at the second or third lecture of Psychology 325.

### 332 Biopsychology of Learning and Memory

Spring. 3 credits. Prerequisites: one year of biology and either a biopsychology class or Biological Sciences 222.

M W F 11:15. T. DeVogd.

This course will survey the approaches that have been or are currently being used in order to understand the biological bases for learning and memory. Topics will include invertebrate, "simple system" approaches, imprinting, avian song learning, hippocampal and cerebellar function, and human pathology. Many of the readings will be from primary literature.

### 342 Human Perception: Applications to Computer Graphic Art and Visual Display

Fall. 3 credits. Prerequisite: Psychology 101. Psychology 205 strongly recommended. Graduate students, see Psychology 642.

T R 11:40-12:55. D. Field.

Our present technology allows us to transmit and display information over a variety of media. To make the most of these media, it is important to consider the limitations and abilities of the human observer. The course will consider a number of applied aspects of human perception with an emphasis on the display of visual information. Topics to be covered include: "Three-dimensional" display systems, color theory, spatial and temporal limitations of the visual systems, attempts at subliminal communication, and "visual" effects in film and television.

### [347 Psychology of Visual Communications

Spring. 4 credits. Limited to 12 students. Prerequisites: Psychology 101 and permission of instructor. Not offered 1990-91.

T 10:10-12:05; lab to be arranged.

J. B. Maas.

An exploration of theories of perception, attitude, and behavior change as they relate to the effectiveness of visually based communication systems. Emphasis is on an empirical examination of the factors that determine the nature and effectiveness of pictorial representations of educational messages in non-print media.]

### 350 Statistics and Research Design

Fall. 4 credits. Prerequisite: a course in the behavioral sciences.

M W F 9:05. T. D. Gilovich.

Acquaints the student with the elements of statistical description (measures of average, variation, correlation, etc.) and, more importantly, develops an understanding of statistical inference. Emphasis is placed on those statistical methods of principal relevance to psychology and related social sciences.

### 361 Biochemistry and Human Behavior (also Nutritional Sciences 361)

Fall. 3 credits. Prerequisites: Biological Sciences 101-102, Chemistry 103-104, Psychology 123, or permission of instructor. S-U grades optional.

M W F 9:05. B. Strupp.

The course is intended to survey the scientific literature on the role of the brain and body biochemical changes as determinants of human behavior. The topics covered include action and effects of psychopharmacologic agents, biology of learning and memory, the role of abnormal biochemistry in cognitive disorders, biochemical theories of psychosis, and effects of nutrition on behavior. A fundamental knowledge of human biology and chemistry is essential.

### 370 Language and Cognition (also Linguistics 370)

Spring. 4 credits. Prerequisites: Linguistics 101 or 264, or Psychology 215, or permission of one of the instructors. Graduate students, see Psychology 670.

T R 1:25-2:40. J. Bowers, H. Kurtzman.

Examination of current research on selected topics in language from both linguistic and psychological perspectives. Topics may include: universal grammar and language acquisition, syntactic parsing, word recognition, sentence production, aphasia, and schizophrenic language.

### [375 Developmental Psychobiology: Motivational Processes (also Nutritional Sciences 375)

Fall. 3 credits. Prerequisite: Psychology 276 or Nutritional Sciences 276. Graduate students, see Psychology 675/Nutritional Sciences 675. Not offered 1990-91; next offered 1991-92.

T R 10:10-11:25. E. Blass.

This course focuses on maturational and experiential influences on motivational processes in animals and humans. Emphasis is placed on the mechanisms underlying mother-infant interactions, and the development of feeding, drinking, and reproduction behaviors.]

### [379 Social Cognition

Spring. 4 credits. Prerequisite: one course in social or cognitive psychology or permission of instructor. Not offered 1990-91.

T R 10:10-11:25. Staff.

The focus of this course is on experimental research that applies cognitive principles to the study of social psychological phenomena. The course begins with an overview of research methodology (no prior knowledge in this area is required). Readings and discussion center around the following topics: (1) the organization and representation of social information; (2) assessing the causes of social behavior; and (3) sources of error and bias in human judgment. Course requirements include an examination, a midterm paper, and a final project.]

### [383 Social Interaction (also Sociology 383)

Spring. 4 credits. Prerequisite: a course in social psychology. Not offered 1990-91.

M W 2:30-4:25. D. Hayes.

Fine-grain analyses of social behavior, its structure, changes, and determinants. Extensive practice in analysis of filmed and taped interactions. Student research is required throughout the course.]

### [387 Health and Disease (also Biology and Society 327 and German Studies 327)

Fall. 4 credits. Limited to 20 students. Not offered 1990-91. Next offered 1991-92.

Hours to be arranged. S. L. Gilman and faculty team.

Everyone knows what health and disease are. Or do they? This Common Learning course on health and disease will explore some of the cultural, psychological, philosophical, anthropological, medical, economic, and political dimensions of these concepts to show how various models of disease function in contexts from business to engineering, from the military to the medical profession. The course will be divided into two segments: the first will examine the general implications of concepts of health and illness; the second will study these general principles as reflected in the definition, treatment, and mythmaking surrounding one specific disease: schizophrenia. The course will draw on specialists from throughout the university.]

### [389 Reading Freud: Race, Gender, and Psychoanalysis (also Comparative Literature 347, English 347, German Studies 347)

Fall. 3 credits. Not offered 1990-91. Next offered 1991-92.

F 1:25-3:20. S. L. Gilman.

This course will read a series of texts from the formative works of Sigmund Freud (beginning with the *Studies in Hysteria* and concluding with Freud's reading of the Schreber autobiography). These readings will be placed within the tension existing at the turn of the century between concept of the biology of race and biology of gender. Close attention will be paid to the cultural, scientific, as well as polemical literature on the ideas of race and gender from the biological writings of the late nineteenth century. The course will also provide an introduction to the basic concepts of Freudian psychoanalytic theory. The class will consist of a one-hour lecture and a one-hour discussion group. All of the primary readings are available in English.]

**[396 Introduction to Sensory Systems (also Biological Sciences 396)]**

Spring. 3 or 4 credits (4 credits with term paper). Registration for the 4-credit option requires permission of instructor. Prerequisites: an introductory course in biology or biopsychology, plus a second course in neurobiology or behavior or perception or cognition or biopsychology. Students will be expected to have elementary knowledge of perception, neurophysiology, behavior, and chemistry. No auditors. Offered alternate years. Not offered 1990-91. Graduate students, see Psychology 696.

M W F 9:05. B. P. Halpern.

The course will be taught using the Socratic method, in which the instructor asks questions of the students. Students read, analyze, and discuss in class difficult original literature dealing with both those characteristics of sensory systems that are common across living organisms and those sensory properties which represent adaptations of animals to particular habitats or environments. The principles and limitations of major methods used to examine sensory systems will be considered. General principles of sensory systems, and auditory, visual, and somesthetic systems are covered. One aspect of each system (e.g., localization of objects in space by sound, color vision, thermoreception) will be selected for special attention. At the level of *An Introduction to the Physiology of Hearing*, by J. O. Pickles; *Photoreceptors: Their Role in Vision*, by A. Fein and E. Z. Szuts; *Comparative Studies of Hearing in Vertebrates*, edited by A. N. Popper and R. R. Fay; and "Information Processing in Cutaneous Mechanoreceptors," *Fed. Proc.*, 42:1983.]

**[402 Current Research on Psychopathology: Depression]**

Spring. 4 credits. Limited to 20 students. Prerequisite: Psychology 325 or HDFS 270. Not offered 1990-91.

W 1:25-4. K. Keil.

Current research and theory on the nature and etiology of depression. Approaches from various perspectives (biological, psychological, socio-cultural) are considered. Minimal attention to psychotherapy and symptomatology.]

**[404 Psychopathology and the Family]**

Spring. 4 credits. Limited to 20 students. Prerequisite: Psychology 325 or HDFS 270.

W 1:25-4. K. Keil.

This course will explore familial influences on the development of abnormal behavior. It will examine how psychological, biological, and cultural factors in a family might contribute to such disorders as anorexia nervosa, depression, sexual abuse, psychopathy, and psychosomatic illnesses. Emphasis will be placed on early childhood experiences in the family and their impact on the development of later psychopathology. The course will also discuss how the evolution of family structures in more recent times (e.g., the rise in day care and divorce) influences the individual. Family therapy approaches and techniques will also be examined.

**[410 Undergraduate Seminar in Psychology]**

Fall or spring. 2 credits. Written permission of section instructor required for registration. Nonmajors may be admitted, but psychology majors are given priority.

Hours to be arranged. Staff.

Information on specific sections for each term, including instructor, prerequisites, and time and place, may be obtained from the Department of Psychology office, 211 Uris Hall.

**[412 Human Experimental Psychology Laboratory]**

Spring. 4 credits. Limited to 20 students. Prerequisite: permission of instructor. Recommended, some experience in programming and one course in experimental psychology. Graduate students, see Psychology 612.

T R 11:40-12:55. D. Field.

A laboratory course using current methods in experimentation in perception and cognitive psychology. Students will attempt to replicate several classic experiments and also develop one independent project. Computers will be available and used in most of the experiments. Projects will be selected from the areas of visual perception, pattern recognition, memory, language and concept learning.

**[415 Concepts, Categories, and Word Meanings]**

Fall. 4 credits. Prerequisites: Psychology 205, 209, 214, or 215, or permission of instructor. Not offered 1990-91. Graduate students, see Psychology 615.

T 1:25-4. F. Keil.

A consideration of what types of categories are psychologically important, of how they are represented and used through concepts, and of how concept structure and semantic structure are interrelated. Different models of concept structure and categorization processes are evaluated, as are models of conceptual change and concept acquisition. Other topics include: relations between concepts and broader knowledge representation systems such as scripts, mental models, and intuitive theories; relative roles of associative information and beliefs in concept structure; categorization in other species; neuropsychological studies of categorization; comparisons of categorization systems across cultures; and comparisons of concept structures across different types of categories.]

**[416 Psychology of Language]**

Spring. 4 credits. Prerequisite: some background in psycholinguistics or linguistics. Not offered 1990-91. Graduate students, see Psychology 616.

T R 1:25-2:40. H. S. Kurtzman.

Each year the course focuses on one or two major theoretical issues in current psycholinguistics. An intensive critical examination is made of the relevant literature from psychology, linguistics, and artificial intelligence. The issues are considered not only at the detailed level of specific hypotheses and evidence but also in relation to broader theoretical trends in the field.]

**[417 The Origins of Thought and Knowledge]**

Spring. 4 credits. Prerequisites: Psychology 205, 209, 214, or 215, or permission of instructor. Graduate students, see Psychology 717. Not offered 1990-91.

T 1:25-4:05. F. Keil.

An in-depth analysis of current theories concerning the growth of thought and knowledge in childhood. Several controversies will be discussed in detail, including: Are mental abilities organized in local domains or modules that have their own patterns of development, or is cognitive development a more general process? Do comparative studies with other species and evolutionary models provide any useful insights into cognitive development in humans? Are there qualitative restructurings of thought and knowledge with development, or is the process more continuous in nature? What restrictions should these developmental considerations place on models of thought and knowledge in adults?]

**[418 Psychology of Music]**

Fall. 3 or 4 credits, depending on whether student elects to do an independent project. Prerequisites: junior or senior standing with major in psychology or music and some background in both, or permission of instructor. Graduate students, see Psychology 618.

T R 1:25-2:40. C. Krumhansl.

Detailed analysis of topics in the psychology of music, including theories of consonance, perception of tonal-harmonic structure, memory for music, and effects of musical training. Emphasis given to experimental methodologies.

**[422 Developmental Biopsychology]**

Fall. 4 credits. Prerequisites: a course in introductory biology and a course in biopsychology or neurobiology (such as Psychology 123 or Biological Sciences 221). Not offered 1990-91. Graduate students, see Psychology 622.

M W F 9:05. B. L. Finlay.

We will discuss the relationship of the development and evolution of the brain to the development of behavior. Topics include normal neuroembryology; how neurons are generated, find targets, and establish connections; the emergence of reflexive and complex behavior; how experience affects the developing brain; evolutionary perspectives on the development of perception, memory, and communication systems; and abnormal development.]

**[425 Brain and Behavior]**

Fall. 3 or 4 credits (4-credit option includes a discussion section and requires an additional paper). Prerequisites: a course in introductory biology and a course in biopsychology or neurobiology (such as Psychology 123 or Biological Sciences 221). Not offered 1990-91. Next offered Fall 1991. Graduate students, see Psychology 625.

M W F 9:05. B. L. Finlay.

We will study the relation between structure and function in the central nervous system. Human neuropsychology and the contribution of work in animal nervous systems to the understanding of the human nervous system will be stressed. Some topics to be discussed include visual and somatosensory perception, organization of motor activity, emotion and motivation, psychosurgery, and memory and language.]



**[426 Seminar and Practicum in Psychopathology]**

Spring. 4 credits. Limited to 16 students. Prerequisite: Psychology 325; permission of instructor required in all cases. Student should apply to the course during preregistration in fall semester; acceptance will be announced before the end of the fall semester. Not offered 1990-91.

T R 2:30-4:25. R. D. Mack.

A seminar and practicum course for advanced students who have mastered the fundamental concepts of personality and psychopathology. An opportunity to explore in depth issues in personality and psychopathology, particularly as they relate to issues of development, fantasy, attachment, and sex roles. Includes an experimental component involving self-disclosure, peer counseling, and group process. The goal: an integration of education and personal growth. It is recommended that students take Psychology 328, the fieldwork course, in conjunction with this seminar.]

**[429 Olfaction and Taste: Structure and Function (also Biological Sciences 429)]**

Fall. 3 or 4 credits (4-credit option requires a term paper or research project. The research project can, but does not need to, study nonhuman vertebrates). Preference given to junior and senior psychology and biology majors and graduate students. Prerequisite: one 300-level course in biopsychology or equivalent. Not offered 1990-91. Graduate students, see Psychology 629.

T R 9:05. B. P. Halpern.

The structural and functional characteristics of olfaction and taste will be explored by reading and discussing current literature in these areas. Structure will be examined at the light levels of electron microscopes as well as at the molecular level. Function will be primarily neurophysiological and biochemical aspects. The emphasis will be on vertebrates, especially air-breathing vertebrates in the case of olfaction, but there will be some coverage of invertebrate forms.]

**[436 Language Development (also Human Development and Family Studies 436 and Linguistics 436)]**

Spring. 4 credits. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. Open to undergraduates and graduate students. S-U grades optional. Offered alternate years.

T R 11:40-12:55. B. Lust.

This course surveys basic issues, methods, and research in the study of first-language acquisition. Major theoretical positions in the field are considered in the light of experimental studies in first-language acquisition of phonology, syntax, and semantics from infancy on. The fundamental linguistic issues of universal grammar and the biological foundations for acquisition are discussed, as are the issues of relations between language and thought. The acquisition of communication systems in nonhuman species such as chimpanzees is addressed, but major emphasis is on the child.

**[440 Sleep and Dreaming]**

Spring. 4 credits. Prerequisites: advanced undergraduate standing and Psychology 101 and 123 or another course in biopsychology or neurobiology.

T R 1:25-2:40. H. Porte.

The course will emphasize equally the neurobiology of sleep and the psychology of dreaming. Students will study the anatomy and physiology of the states and rhythms of sleep, the functions of sleep, and the phylogeny and ontogeny of sleep as topics in the biology of behavioral state. Insomnia and hypersomnia, narcolepsy, sleep disorder in endogenous depression, "jet lag," sleep at the wrong time and doing the wrong thing in sleep (running for example, or fighting, or eating) will be presented as errors in the basic rhythms, mechanisms and behavioral components of sleep. In the second half of the course students will examine the data of dreams and hypnagogic experience—including their own—in relation to sleep processes. From this perspective, students will evaluate theories of dreaming from Freud's to Francis Crick's, and will consider whether dreaming is meaningful or meaningless, encrypted or transparent, and better remembered or better forgotten.

**[450 Bio-historical Construction of Gender and Sexuality (also Women's Studies 450, Psychology 650, and Women's Studies 650)]**

Fall. 4 credits. Prerequisite: Psychology 277/ Women's Studies 277 or permission of instructor. Limited to 12 seniors and graduate students. No preregistration; interested students should attend the first class session. Graduate students, see Psychology/Women's Studies 650.

W 2:30-4:30. S. Bem.

This seminar is designed to bridge the divide between biological/essentialist perspectives on gender and sexuality, and historical/social constructionist perspectives. It is very interdisciplinary, covering material from biology, history, anthropology, law, sociology, psychology, psychiatry, philosophy, and feminist theory. Part 1 considers how biology and history have interacted in Western culture to produce both social institutions and discourses that have embedded within them the following three organizing principles or "cultural lenses": (a) biological determinism, (b) androcentrism, and (c) gender polarization (including the stigmatizing of homosexuality). Part 2 considers how the individuals living within such a cultural context are transformed from being male or female newborns to being "masculine" and "feminine" adults. Part 3 considers possibilities for both social and personal change.

**[465 Mathematical Psychology]**

Spring. 4 credits. Prerequisites: one year of college mathematics (finite mathematics or calculus), a course in probability or statistics, and a course in psychology. Not offered 1990-91.

T R 10:10-11:40. Staff.

Mathematical approaches to psychological theory are discussed. Possible topics include choice and decision, signal detectability, measurement theory, scaling, stochastic models, and computer simulation.]

**[467 Seminar: The Examined Self—A Psychohistorical View]**

Spring. 4 credits. Prerequisites: 9 credits of psychology including Psychology 325 or equivalent, and permission of instructor before course enrollment.

T 1:25-3:25. H. M. Feinstein.

Based primarily on American autobiographies dating from the seventeenth century to the twentieth century, this seminar will explore the shifting interface between self and historical context. Students should be prepared to write and talk about their own lives as well as the historical figures selected for study.

**[468 American Madness]**

Spring. 4 credits. Limited to 15 students. Prerequisites: Psychology 325 and permission of instructor. Not offered 1990-91.

T 1:25-3:25. H. M. Feinstein.

The seminar will be devoted to an analysis of insanity as a psychological and historical phenomenon. Selected writings by the mentally ill and their definers will be studied.]

**[469 Psychotherapy: Its Nature and Influence]**

Spring. 4 credits. Limited to senior psychology majors. Prerequisites: Psychology 325 or equivalent and permission of instructor during preregistration.

W 7-10 p.m. R. D. Mack.

A seminar on the nature of psychotherapy. Issues related to therapeutic goals, differing views of the nature of man, ethical concerns, and research problems are also considered. Experiential and role-playing exercises in class and three hours per week of peer counseling outside of class are integral parts of the seminar experience.

**[470 Undergraduate Research in Psychology]**

Fall or spring. 1-4 credits. S-U grades optional. Written permission from the staff member who will supervise the work and assign the grade must be included with the course enrollment material. Students should enroll in the section listed for that staff member. A section list is available from the Department of Psychology.

Hours to be arranged. Staff.

Practice in planning, conducting, and reporting independent laboratory, field, and/or library research.

**[471 Advanced Undergraduate Research in Psychology]**

Fall or spring. 1-4 credits. S-U grades optional. Written permission of the staff member who will supervise the work and assign the grade must be included with the course enrollment material. Students should enroll in the section listed for that staff member. A section list is available from the Department of Psychology.

Hours to be arranged. Staff.

Advanced experience in planning, conducting, and reporting independent laboratory, field, and/or library research. One, and preferably two, semesters of Psychology 470 is required. The research should be more independent and/or involve more demanding technical skills than that carried out in Psychology 470.

**472 Multiple Regression**

Spring, weeks 1–7. 2 credits. Prerequisite: one solid semester of introductory statistics. Analysis of variance is helpful but not required. M W F 10:10. R. Darlington.

Uses and pitfalls of multiple regression in causal analysis, path analysis, and prediction. Emphasis on analyzing data collected under uncontrolled conditions. Includes colinearity, indicator variables, sets, adjusted and shrunken R<sup>2</sup>, suppressors, hierarchical analysis, overcontrol, experimental design. Very little hand computation; uses MYSTAT computer program.

**473 General Linear Model**

Spring, weeks 8–14. 2 credits. Prerequisite: Psychology 472 or equivalent. M W F 10:10. R. Darlington.

Includes multicategorical variables, corrections for multiple tests, diagnostic methods, nonlinear relationships, interaction, main and simple effects, nesting, repeated measures, and MANOVA. Emphasizes MYSTAT, and SYSTAT, briefly discusses SAS PROC REG and SAS PROC GLM.

**[475 Multivariate Analysis of Psychological Data]**

Fall. 2 credits. Prerequisite: Psychology 472 or permission of instructor. Not offered 1990–91.

R 10:10–12:05. R. Darlington. Most of the course concerns relative advantages of factor analysis and newer competing techniques for discovering hidden patterns in correlational data. Uses SYSTAT, SAS PROC FACTOR and PROC PRINCOMP. Also includes brief discussions of MANOVA, logit analysis, logistic regression, canonical correlation analysis, and multidimensional scaling.]

**[476 Representation of Structure in Data]**

Fall. 3 credits. Prerequisites: one year of college mathematics (finite mathematics or calculus) and a course in the social sciences. Not offered 1990–91.

W 2:30–4:30. Staff. Representations of preferences, dominance data, psychological distances, and similarities will be discussed. Topics include unidimensional and multidimensional scaling, unfolding, individual differences scaling, hierarchical clustering, and graph-theoretic analysis.]

**478 Psychometric Theory**

Fall, weeks 1–10. 3 credits. Prerequisite: Psychology 472 or permission of instructor. T R 10:10–12:05. R. Darlington.

Statistical methods relevant to the use, construction, and evaluation of psychological tests.

**479 Multisample Secondary Analysis**

Fall, weeks 11–14. 1 credit. Prerequisite: Psychology 350 or equivalent.

T R 10:10–12:05. R. Darlington. Statistical methods for analyzing and integrating the results of many independent studies on related topics.

**481 Advanced Social Psychology**

Fall. 4 credits. Limited to 20 students. Prerequisite: a course in social psychology or permission of instructor.

T R 10:10–11:25. D. T. Regan. Selected topics in social psychology are examined in depth with an emphasis on the relationship between experimental research and the development of theory. Readings will be mostly primary sources. Among the theoretical approaches to social behavior we may discuss are social comparison theory,

cognitive dissonance, attribution processes and social judgment, social exchange theory, and biological perspectives.

**482 Death and Dying**

Spring. 4 credits. Limited to 20 juniors and seniors. Prerequisites: 6 credits in sociology or psychology.

T R 2:30–4:25. W. Collins. Issues of death and dying in modern American society are explored from the perspectives of psychology, sociology, and the health-related professions. Possible inadequacies in current practice are examined and alternatives discussed.

**488 Human Development in Context (also Human Development and Family Studies 488)**

Spring. 4 credits. Open to juniors, seniors, and graduate students. Prerequisites: one course in statistics (which may be taken simultaneously) and two courses in the social sciences, or one in human biology and one in the social sciences.

T R 2:30–4:25. U. Bronfenbrenner. The course examines highlights of what is known about human development in the actual settings in which human beings live and grow. The material presented reveals how development in its various aspects—cognitive, emotional, and social—occurs through the progressive interplay between the maturing capacities and characteristics of an active, exploring, thinking human organism and the changing situational, cultural, and historical contexts in which the person lives. Particular emphasis is given to the role of the family, peer group, school, workplace, community, and social structure and belief systems of the larger society. Course work is carried out primarily through the analysis of selected studies that shed light on critical issues in development. The main focus is not on specific findings but on key processes and principles of development to which the findings point. Students are offered guidance and experience in analyzing and evaluating research reports, with particular emphasis on the nature and intellectual excitement of the scientific process and on the implications of scientific knowledge for public policy and practice. The course is organized in terms of successive stages in the life course. At each stage the material presented will emphasize change and continuity in the two-way developmental processes taking place between a biologically maturing person and the progressively more complex environments into which the person moves through the life.

**[489 Seminar: Selected Topics in Social Psychology and Personality (also Sociology 489)]**

Spring. 3 credits. Prerequisites: one course in psychology or one course in sociology or permission of instructor. Not offered 1990–91. Graduate students, see Psychology 689.

Hours to be arranged. D. Bem. The specific topics of discussion vary, but the general emphasis is on a critical examination of the study of individuals in social contexts.]

**[490 History and Systems of Psychology]**

Fall. 4 credits. Intended for juniors, seniors, and graduate students, majors and nonmajors. Prerequisites: at least three courses in psychology or related fields or permission of instructor. Not offered 1990–91.

W 2–4:30. Staff. The course aims to acquaint students with the recent history of psychology and to help them to identify important trends and underlying

assumptions in contemporary writings. After a discussion of relevant nineteenth-century developments, a number of the major historical systems will be surveyed: the introspectionist, functionalist, behaviorist, and Gestalt psychologies; psychoanalysis; and cognitive psychology. Emphasis will be on the ideas that have shaped modern psychology.]

**491 Research Methods in Psychology**

Spring. 4 credits. Enrollment limited to 25 students. Recommended: permission of instructor, Psychology 350, experience in upper-division psychology courses, or graduate standing. Graduate students, see Psychology 691.

T R 10:10–11:25. D. Dunning. An intensive examination of the basic research methods used in social, personality, cognitive, and developmental psychology. The course will focus on designing and conducting experiments, i.e., how to turn vague theories into concrete and testable notions, evaluate studies, avoid common pitfalls, and, finally, remain ethical. Beyond learning methods of “correct” and rigorous experimentation, we will also discuss what makes a research study actually interesting. The course will, in addition, cover test construction, survey methods, and “quasi experiments.” Students will concentrate on completing a small research project in which they conduct an experiment, interpret its data, and write up the results.

**492 Sensory Function (also Biological Sciences 492)**

Spring. 4 credits. Prerequisite: a 300-level course in biopsychology, or Biological Sciences 222 or 311, or permission of the instructors. Students are expected to have a knowledge of elementary physics, chemistry, and behavior. S-U grades optional. Offered alternate years. Graduate students, see Psychology 692.

M W F 10:10; sec, hours to be arranged. H. C. Howland, B. P. Halpern. This course covers classical topics in sensory function such as vision, hearing, touch and balance, as well as some more modern topics like sensory coding, location of stimulus sources in space, and the development of sensory systems. Both human and nonhuman systems are discussed. In all cases the chemical, physical, and neurophysiological bases of sensory information are treated, and the processing of this information is followed into the central nervous system. At the level of *The Senses*, edited by Barlow and Mollon, and *An Introduction to the Physiology of Hearing* 2nd edition, by Pickles.

**Advanced Courses and Seminars**

Advanced seminars are primarily for graduate students, but with the permission of the instructor they may be taken by qualified undergraduates. The selection of seminars to be offered each term is determined by the needs of the students.

A supplement describing these advanced seminars is available at the beginning of each semester and can be obtained from the department office. The following courses may be offered either term and carry 4 credits unless otherwise indicated.

**502 Professional Writing in Psychology****510–511 Perception****512–514 Visual Perception****513 Learning**

**515 Motivation**

**517 Language and Thinking**

**518 Psycholinguistics**

**519-520 Cognition**

**521 Psychobiology**

**522 Topics in Perception and Cognition**

**523 Physiological Psychology**

**524 Sex Differences in Brain and Behavior (also Biological Sciences 626)**

Spring. 2 credits. Limited to 12 seniors and graduate students.

Hours to be arranged. T. DeVoogd.  
A survey of the newly discovered animal models for sex differences in the brain. Topics include the role of steroids in brain development, whether hormones can modify the structure of the adult brain, and the consequences of such sex differences in anatomy for behavior.

**525 Mathematical Psychology**

**531 History of Psychology**

**535 Animal Behavior**

**541 Statistical Methods**

**543 Psychological Tests**

**544 Topics in Psychopathology and Personality**

**545 Methods in Social Psychology**

**547 Methods of Child Study**

**551 Distinguished Speakers**

**561 Human Development and Behavior**

**580 Experimental Social Psychology (also Sociology 580)**

**591 Educational Psychology**

**595 Teaching of Psychology**

**596 Improvement of College Teaching**

**600 General Research Seminar**  
Fall or spring. No credit.

**605 Perception (also Psychology 205)**  
Spring. 4 credits.  
T R 2:55-4:10. J. Cutting.

**[607 Chemosensory Perception (also Psychology 307)]**  
Fall. 4 credits. Not offered 1990-91.  
T R 9:05. B. P. Halpern.]

**609 Development of Perception (also Psychology 309)**  
Fall. 4 credits.  
T R 1:25-2:40. E. S. Spelke.

**[612 Human Experimental Psychology Laboratory (also Psychology 412)]**  
4 credits. Not offered 1990-91.  
T R 11:40-12:55. D. Field.]

**[613 Obesity and the Regulation of Body Weight (also Nutritional Sciences 315)]**

Spring. 3 credits. Limited to 30 students.  
Prerequisites: one course in psychology and one course in nutrition. Undergraduate students may register with permission of instructor. S-U grades optional. Offered alternate years. Not offered 1990-91.  
T R 1:30-3. D. Levitsky.

This course is a multidisciplinary discussion of the causes, effects, and treatments of human obesity. Topics include the biopsychology of eating behavior, the genetics of obesity, the role of activity and energy metabolism, psychosocial determinants of obesity, anorexia nervosa, therapy and its effectiveness, and social discrimination.]

**614 Knowledge and Reasoning (also Psychology 214)**  
Spring. 4 credits.  
T R 1:25-2:40. C. Krumhansl.

**[615 Concepts, Categories, and Word Meaning (also Psychology 415)]**  
Fall. 4 credits. Not offered 1990-91.  
T 1:25-4:05. F. Keil.]

**[616 Psychology of Language (also Psychology 416)]**  
Spring. 4 credits. Not offered 1990-91.  
T R 1:25-2:40. H. Kurtzman.]

**618 Psychology of Music (also Psychology 418)**  
Fall. 4 credits.  
T R 1:25-2:40. C. Krumhansl.

**[622 Developmental Biopsychology (also Psychology 422)]**  
Fall. 4 credits. Not offered 1990-91.  
M W F 9:05. B. L. Finlay.]

**[625 Brain and Behavior (also Psychology 425)]**  
Fall. 4 credits. Not offered 1990-91. Next offered fall 1991.  
M W F 9:05. B. L. Finlay.]

**626 Evolution of Human Behavior (also Psychology 326)**  
Fall. 4 credits.  
T R 2:55-4:10. R. Johnston.

**[629 Olfaction and Taste: Structure and Function (also Psychology 429 and Biological Sciences 429)]**  
Fall. 4 credits. Not offered 1990-91.  
T R 9:05. B. P. Halpern.]

**650 Bio-historical Construction of Gender and Sexuality (also Psychology 450 and Women's Studies 450 and Women's Studies 650)**  
Fall. 4 credits.  
W 2:30-4:30. S. Bem.

**670 Language and Cognition (also Psychology 370 and Linguistics 370)**  
Spring. 4 credits.  
T R 1:25-2:40. J. Bowers, H. S. Kurtzman.

**675 Developmental Psychobiology: Motivational Processes (also Psychology 375, Nutritional Sciences 375 and Nutritional Sciences 675)**  
Fall. 4 credits.  
T R 10:10-11:25. E. Blass.

**676 Motivation (also Psychology 276, Nutritional Sciences 276, and Nutritional Sciences 676).**

Spring. 4 credits.  
T R 10:10-11:25. E. Blass.

**683 Seminar in Interaction (also Sociology 683)**

**[685 Sex Differences and Sex Roles (also Sociology 685 and Women's Studies 685)]**  
Not offered 1990-91.  
Staff.]

**[689 Seminar: Selected Topics in Social Psychology and Personality (also Psychology 489 and Sociology 489)]**  
Spring. 4 credits. Not offered 1990-91.  
Hours to be arranged. D. Bem.]

**691 Research Methods in Psychology (also Psychology 491)**  
Spring. 4 credits.  
T R 10:10-11:25. D. Dunning.

**692 Sensory Function (also Psychology 492 and Biological Sciences 492)**  
Spring. 4 credits.  
M W F 10:10. H. C. Howland,  
B. P. Halpern.

**[696 Introduction to Sensory Systems (also Psychology 396 and Biological Sciences 396)]**  
Spring. 4 credits. Not offered 1990-91.  
M W F 9:05. B. P. Halpern.]

**700 Research in Biopsychology**

**709 Developmental Psychology (also Psychology 209)**  
Spring. 4 credits.  
T R 1:25-2:40. E. Spelke.

**710 Research in Human Experimental Psychology**

**[713 Perceptual and Cognitive Processes (also Psychology 313)]**  
Spring. 4 credits. Not offered 1990-91.  
R 1:25-4:25. Staff.]

**715 Psycholinguistics (also Psychology 215)**  
Fall. 4 credits.  
M W F 11:15-12:05. H. S. Kurtzman.

**[717 The Origins of Thought and Knowledge (also Psychology 417)]**  
Spring. 4 credits. Not offered 1990-91.  
T 1:25-4:00. F. Keil.]

**720 Research in Social Psychology and Personality**

**[722 Hormones and Behavior (also Psychology 322 and Biological Sciences 322)]**  
Spring. 4 credits. Not offered 1990-91.  
T R 10:10-11:25. E. A. Regan,  
R. Johnston.]

**773 Proseminar in Cognitive Studies I (also Cognitive Studies 773, Philosophy 773, Linguistics 773, and Computer Science 773)**

Fall. 2 credits.

R 1:25–2:40. Staff (taught jointly by faculty from Cornell's Cognitive Studies Program, representing fields of computer science, linguistics, psychology and philosophy).

This is the first term of a year-long lecture-and-discussion course that is intended to provide graduate students with an interdisciplinary introduction to the study of knowledge, its representation, acquisition, and use. Topics may include the psychology of perception and cognition; the philosophy of mind, language, and knowledge; the phonology, syntax, and semantics of natural language; computational approaches to natural language processing, vision and reasoning; parallel distributed processing, and neuropsychology.

**[774 Proseminar in Cognitive Studies II (also Computer Science 774, Linguistics 774 and Philosophy 774)]**

Spring. 2 credits.

R 1:25–2:40. Staff (taught jointly by faculty from Cornell's Cognitive Studies Program, representing fields of computer science, linguistics, philosophy, and psychology.)

This is the second half of a year-long lecture-and-discussion course that is intended to provide graduate students with an interdisciplinary introduction to the study of knowledge, its representation, its acquisition, and its use.

Topics may include the psychology of perception and cognition; the philosophy of mind, language, and knowledge; the phonology, syntax, and semantics of natural language; computational approaches to natural language processing, vision and reasoning; parallel distributed processing, and neuropsychology.

**900 Doctoral Thesis Research in Biopsychology**

**910 Doctoral Thesis Research in Human Experimental Psychology**

**920 Doctoral Thesis Research in Social Psychology and Personality**

**Summer Session Courses**

The following courses are also frequently offered in the summer session, though not necessarily by the same instructor as during the academic year. Not all of these courses will be offered in a particular summer. Information regarding these courses and additional summer session offerings in psychology is available from the department before the end of the fall semester.

**101 Introduction to Psychology: The Frontiers of Psychological Inquiry**

**123 Introduction to Biopsychology**

**128 Introduction to Psychology: Personality and Social Behavior**

**215 Psycholinguistics**

**265 Psychology and Law**

**280 Introduction to Social Psychology**

**281 Interpersonal Relations and Small Groups (also Sociology 281)**

**325 Introductory Psychopathology**

**350 Statistics and Research Design**

**380 Community Mental Health**

**469 Psychotherapy: Its Nature and Influence**

**Special Programs**

The Department of Psychology, in conjunction with Human Service Studies, the Field Study Office of the College of Human Ecology, and the Tel-Aviv University School of Social Work will periodically offer an eight-week summer program in Community Health. The course will include three weeks at Cornell and five weeks in Israel. It may be taken for 10–12 credits. For further information, contact Ronald Mack in the Department of Psychology.

**ROMANCE STUDIES**

The Department of Romance Studies (Alice Colby-Hall, chair) offers courses in French literature, Italian literature, and Spanish literature. In addition, the department's program includes courses in French and Spanish languages, French linguistics, semiotics, and courses in French, Italian, and Hispanic culture. Through its course offerings and opportunities for independent study, the department seeks to encourage study of the interactions of the Romance literatures among themselves, with other literatures, and with other fields of inquiry.

**French**

J. Béreaud (director of undergraduate studies, 265 Goldwin Smith Hall, 255-6407), A. Berger, A. M. Colby-Hall, N. Furman, D. I. Grossvogel, R. Klein, P. Lewis, J. Ngate, K. Perry, A. Seznec, S. Tarrow, L. R. Waugh.

**The Major**

The major in French is designed to give students proficiency in the oral and written language, to acquaint them with French literature and culture, and to develop skills in literary and linguistic analysis.

While prospective majors should try to plan their programs as far ahead as possible, no student will be refused admission merely because of a late start. It is even possible for a student to begin French at Cornell and become a major. Students wishing to major in French literature should consult the director of undergraduate studies of the Department of Romance Studies, Professor J. Béreaud, who will admit them to the major. After their admission students will choose an adviser from among the French faculty. Students interested in a major in French linguistics should read the description of the major under Modern Languages and Linguistics—French.

**The Core**

- 1) All majors are expected to acquire a sound degree of competence in language. This competence is demonstrated by the successful completion of French 312 or by the passing of a special examination to be taken no later than the end of the junior year. A typical program will involve two semesters of language at the 200 level (to be taken no later than the end of the sophomore year) and two semesters of language at the 300 level (French 311–312). Students may bypass any part of the sequence through placement examinations.

- 2) In addition, all majors are expected to take French 201 and 202. At least one of these should be completed successfully no later than the end of the sophomore year.

**The Options**

- 1) The successful completion of six courses in French literature or civilization at the 300 level or above. These courses will be selected in consultation with the student's major adviser and will normally include at least one course from each of the three major periods of French literature (Medieval to Renaissance, the seventeenth and eighteenth centuries, and the nineteenth and twentieth centuries).
- 2) The successful completion of two related courses in one of the following: (a) French literature; (b) French linguistics; (c) French history, culture, music, or history of art or architecture; (d) courses in linguistic theory, history of language, psycholinguistics, or philosophy of language.

**Study Abroad in France**

French majors or other interested students may study in France for one or two semesters during their junior year. Opting for one of several study-abroad plans recognized by the departments of Romance Studies and Modern Languages and Linguistics facilitates the transfer of credit. Information about these plans is available from the director of undergraduate studies.

Students interested in studying in France are encouraged to consider the special benefits offered by EDUCO, the program in Paris cosponsored by Cornell and by Duke University. EDUCO offers advanced students a challenging course of study and the experience of total immersion in French life and culture in Paris. Participants in this program spend the year or the semester as fully matriculated students at the University of Paris and other institutions of higher learning in Paris, including the Institut d'Etudes Politiques (Sciences Po), selecting courses in many fields from the regular university course offerings. Students begin the academic year with an intensive three-week orientation into French history, society, and daily life. While it is possible to enroll in the EDUCO Program for one semester, admission will be given first to students planning to study abroad for the full academic year.

EDUCO maintains a center in Paris with appropriate support staff. The resident director, chosen annually from the Cornell and Duke faculties, teaches a special seminar each semester, provides academic advice, and helps ensure the quality of the courses. The center, which includes a small library and word-processing facilities, is regularly used by students for special tutorials, seminars, and lectures, as well as informal gatherings.

Honors. The honors program encourages well-qualified students majoring in French literature to do independent work in French outside the structure of courses. The preparation of the senior honors essay, generally spread over two terms, provides a unique learning opportunity, since it allows for wide reading, and extensive rewriting to a degree not possible in the case of course papers.

No special seminars or courses are required of honors students, but they will have regular meetings with the faculty advisers who have



agreed to supervise their work. They may receive course credit by enrolling in French 429–430, but these independent study courses must be taken in addition to the courses that meet the minimum requirements for the major. At the end of the senior year each honors student is examined orally on the honors essay by a jury consisting of his or her faculty adviser and two other faculty members. The awarding of honors is determined by the student's grades in the major and the quality of the honors essay.

**Fees.** Depending on the course, a small fee may be charged for copies of texts used in course work.

### Language and Linguistics

Most language courses and French linguistics courses are offered by Modern Languages and Linguistics. Further language courses (conversation and advanced level), French linguistics courses, and all literature courses are listed below.

*Note: Students placed in the 200-level courses have the option of taking language and/or literature courses; see listings under "Literature" for descriptions of the literature courses, any of which may be taken concurrently with 203–204 (offered by Modern Languages and Linguistics) or 200 described below.*

### 200 Intermediate Course: Language and Literature

Fall or spring. 3 credits. Prerequisite: qualification in French with a CPT score no higher than 629. Offered by the Department of Romance Studies. Conducted in French.

Fall: M W F 10:10, 11:15, or T R 10:10–11:25, S. Tarrow and staff; spring: M W F 10:10 or 12:20. S. Tarrow and staff.

Designed to provide an introduction to contemporary French culture and literature. Texts read and discussed are selected for their cultural and humanistic value. One-third of class time is devoted to grammar review, with emphasis on reading and writing skills.

### 210 Intermediate French Conversation

Fall or spring. 2 credits. Limited to 15 students. Prerequisite: French 203 or 211 or equivalence (Q+) on the Cornell Advanced Standing Examination (CASE).

Fall: T R 8:40–9:55, 11:40–12:55, or 1:25–2:40. A. Berger and staff. Spring: T R 8:40–9:55 or 10:10–11:25. J. Béraud and staff.

The course is based on audio-visual materials used in class; slides and recordings will accompany extensive discussions. A modest amount of reading each week will aim at increasing students' active vocabulary.

### 310 Advanced French Conversation

Spring. 2 credits. Limited to 15 students. Priority given to seniors. Prerequisite: French 204 or 212 or Cornell Advanced Standing Examination (CASE) placement of Q++.

T R 11:40–12:55, or 1:25–2:40. J. Béraud and staff.

This course is based on discussion of articles published in the French press (*L'Express* magazine). A few recordings and films will also be used.

### 311 Advanced French

Fall. 4 credits. Limited to 15 students. Prerequisite: French 204 or 212 or placement by the Cornell Advanced Standing Examination (CASE).

M W F 11:15, staff; M W F 12:20, staff; T R 1:25–2:40. A. Berger.

All-skills course. Detailed study of present-day syntax. Reading and discussion of texts of cultural relevance. Weekly papers.

### 312 Advanced French

Spring. 4 credits. Limited to 15 students. Prerequisite: French 311 or placement by the Cornell Advanced Standing Examination (CASE).

M W F 10:10 or 11:15. J. Béraud and staff.

Continuation of work done in French 311. Less emphasis will be placed on study of grammar, more on the examination of texts, on questions of style, and on oral presentation by students. Weekly papers.

### 400 Semiotics and Language (also Comparative Literature 410 and Linguistics 400)

Spring. 4 credits. Prerequisite: some background in an area relevant to semiotics—e.g., linguistics, philosophy, literature, psychology, or anthropology—or permission of the instructor.

Hours to be announced. L. Waugh. An introduction to the study of semiotics in general and to particular semiotic theories (for example, those of Saussure, Peirce, Barthes, Jakobson) and to language as a semiotic system. The particular topics to be discussed will depend on the interests of the students.

### [408 Linguistic Structure of French I (also Linguistics 408)]

4 credits. Not offered 1990–91.]

### 410 Structure of French II (also French 410 Modern Languages and Linguistics)

Fall. 4 credits. Prerequisite: Permission of instructor.

Hours to be announced. L. Waugh. A synchronic study and analysis of modern French, with emphasis on semantics, pragmatics, and discourse analysis.

### [424 Composition and Style]

4 credits. Not offered 1990–91.]

### [604 Contemporary Theories of French Grammar]

4 credits. Not offered 1990–91.]

### Literature

#### [105 Freshman Writing Seminar: The French Novel]

3 credits. Not offered 1990–91.]

#### 106 Freshman Seminar: Women Writers in France

Spring. 3 credits.

T R 10:10–11:25. K. Perry.

Within or against a given frame of reference not created by themselves or by other women, these authors create their own version of tradition (courtly love, Catholic doctrine, the Western political or philosophical traditions). This course will explore what these new perspectives reveal about society and what conflicting views and versions of society tell us about any "frame" of interpretation. Authors to be studied will include: Marie de France, Christine de Pizan, Louise Labe, Marguerite de Navarre, Madame de Lafayette, George Sand, Simone de Beauvoir, Marguerite Duras.

Students will write essays based on these different "frames."

#### [107 Freshman Writing Seminar: Readings in Modern Literature]

3 credits. Not offered 1990–91.]

#### 109 Freshman Writing Seminar: Techniques of Interpretation: An Introduction to Semiotics

Fall or spring. 3 credits.

Fall: M W F 9:05 or T R 1:25–2:40.

Spring: T R 10:10–11:25. D. Polachek and staff.

In its broadest meaning semiotics is the study of signs that carry information: roadside signs, fashions, advertisements, publicity posters, literary modes. This course, which does not presuppose prior technical knowledge, will introduce the students to a critical reading of signs: the signifier (the concrete expression of the sign) and the signified (the message) and their various interactions. Exercises will be essays on how to analyze various signs taken from practical experience, such as advertisements from magazines or TV or from cultural phenomena (fashion codes, artistic modes).

#### 201 Introduction to French Literature

Fall, spring, or summer. 3 credits. Prerequisite: a CPT score of 600 or higher or a 200-level language course. French 201 serves as a prerequisite for all 300-level courses in French literature and is required of all majors. The course is divided into small sections. Some are taught entirely in French; the others are taught in English. (For times of the all-French sections, see the supplemental course description available in Goldwin Smith Hall 283.) Readings for all sections are the same and all in French. Papers may be written in French or in English.

Fall: M W F 9:05, staff; M W F 10:10, staff; M W F 11:15, K. Perry; M W F 12:20, staff; T R 2:55–4:10, staff. Spring: M W F 10:10, J. Béraud; M W F 11:15, staff; M W F 12:20, staff; M W F 1:25, staff; T R 11:40–12:55, staff.

Stress is on the development of reading skills and, more generally, on cultural, sociological, and aesthetic implications of the texts. Readings will include works by major nineteenth- and twentieth-century authors in each of three principal genres: poetry, theatre, and novel.

#### 202 Studies in French Literature

Fall or spring. 3 credits. Prerequisite: French 201 or a CPT achievement score of 650 or more (students who have not taken French 201 should obtain consent of instructor; those with scores in the 560–649 range should see the description of French 200 and 201). Required of all majors, but not limited to them. Conducted in French.

Fall: M W F 12:20 or T R 10:10–11:25. D. Polachek and staff. Spring: M W F 11:15 or 1:25 or T R 10:10–11:25. A. Berger and staff.

Study of the classic literature of seventeenth-century France (Corneille, Racine, Molière, Madame de Lafayette) and its immediate forebears (Montaigne) and successors in the Enlightenment (Voltaire, Rousseau, Diderot, Beaumarchais). Special attention will be paid to the connections between classicism and humanistic trends.

#### [309 Mystery and the Mystery Story (also Comparative Literature 309)]

4 credits. Not offered 1990–91.]

**[318 Music and Poetry in France: Late Middle Ages and Renaissance (also French 618 and Music 373/673)]**  
4 credits. Not offered 1990–91.]

**[320 French Civilization]**  
4 credits. Not offered 1990–91.]

**[325 The Modern French Novel: A Form in Search of Itself]**  
4 credits. Not offered 1990–91.]

**[329 Francophone Caribbean Literature]**  
4 credits. Not offered 1990–91.]

**[330 Francophone African Literature]**  
4 credits. Not offered 1990–91.]

**[331 Masterpieces of French Drama I: The Classical Era]**

Spring. 4 credits.

T R 1:25–2:40. D. Polachek.

This course aims both to introduce the student to the history of French theatre from its medieval origins to the French Revolution and to discuss in detail the several major plays of the “neo-classical period.” Dramatists whose works will be read will include, from the seventeenth century, Corneille, Racine, and Molière, and from the eighteenth century, Marivaux and Beaumarchais.

**[332 Masterpieces of French Drama II: The Comic in the Modern Era]**  
4 credits. Not offered 1990–91.]

**[333 Contemporary French Thought]**  
4 credits. Not offered 1990–91.]

**[334 The Novel as Masterwork]**  
Spring. 4 credits. Prerequisite: French 201 or permission of instructor. Conducted in French.  
T R 10:10–11:25. N. Furman.  
The second in a series of three courses that survey the French novel, this course traces the evolution of the genre in the nineteenth century. Major works of Stendhal, Balzac, Flaubert, and Zola will be emphasized.

**[335 Romance to Revolution: The French Novel before 1789]**  
4 credits. Not offered 1990–91.]

**[338 French Poetry from Its Origins to the Revolution of 1789]**  
4 credits. Not offered 1990–91.]

**[354 New Prose, Old Prose]**  
4 credits. Not offered 1990–91.]

**[356 Lyon and Paris in the Sixteenth Century]**

Fall. 4 credits.

M W F 1:25. K. Perry.

Through the works of Marot, Scève, Labé, Marguerite de Navarre, Rabelais, Ronsard, and Du Bellay, this course will explore the birth and decline of the “School of Lyon” and the rise of the Pléiade in relation to several social and historical problems. These works reveal the role of the repression of Protestantism in the demise of Lyon as a cultural center, as well as the initial importance of women authors for the French Renaissance, and the later exclusion of women from Parisian culture. Such issues will help to explain the early importance of Lyon and the later dominance of Paris, as well as to place the literature in an historical context. Readings and discussions in French.

**[358 Gustave Flaubert]**  
4 credits. Not offered 1990–91.]

**[362 Poems, Institutions, and Other Fictions in the Realm of Francis the First (also History 362)]**  
4 credits. Not offered 1990–91.]

**[369 Comic Theater in the Seventeenth Century]**  
4 credits. Not offered 1990–91.]

**[370 Perspectives on the Age of Enlightenment: “Enlightened” Literature]**

Fall. 4 credits.

T R 10:10–11:25. A. Berger.

Through a reading of various works of the French eighteenth century (by Montesquieu, Voltaire, Diderot, Rousseau, and Sade), we will study the emergence of new literary discourses and practices aiming at a “secularisation” of the literary field, in conjunction with the ideological and epistemological changes that took place under the name of Enlightenment.

**[371 Eighteenth-Century Theater]**  
4 credits. Not offered 1990–91.]

**[372 Reading Order of Tragedy]**  
4 credits. Not offered 1990–91.]

**[375 Eighteenth-Century Novel]**  
4 credits. Not offered 1990–91.]

**[379 Victor Hugo—Romantic Movement]**  
4 credits. Not offered 1990–91.]

**[380 Introduction to French Romanticism]**  
4 credits. Not offered 1990–91.]

**[388 The French Lyric Romance from Symbolism to Surrealism]**  
4 credits. Not offered 1990–91.]

**[389 French Romanticism (also Women's Studies 493)]**  
4 credits. Not offered 1990–91.]

**[390 Modern French Criticism]**  
4 credits. Not offered 1990–91.]

**[394 Sartre and Existentialism]**  
Spring. 4 credits. Prerequisite: French 201, 202.

M W F 9:05. D. Grossvogel.

Existential thought, literary strategy, social consciousness, and criticism as reflected in the writings of Sartre.

**[395 Camus and His Contemporaries]**  
4 credits. Not offered 1990–91.]

**[396 The Contemporary French Novel: 1950 to the Present]**

Spring. 4 credits. Prerequisite: French 201 or permission of instructor.

T R 11:40–12:55. S. Tarrow.

The course will focus on novels written after 1960, tracing the development of new forms of the genre and new voices in the repertoire. Works by well-known authors such as Camus, Robbe-Grillet, and Duras will be accompanied by those of North African and immigrant writers. Issues of language and identity will be considered in the context of European interpreters and an increasingly multicultural society. Weekly readings, two short essays, and a final paper are required.

**[398 Six French Poets]**  
4 credits. Not offered 1990–91.]

**[404 Cogito Ergo Sum: Thought and Existence from Descartes to Sartre (also Comparative Literature 404 and Romance Studies 404)]**  
4 credits. Not offered 1990–91.]

**[419–420 Special Topics in French Literature]**

419, fall; 420, spring. 2–4 credits each term.

Prerequisite: permission of instructor.

Staff.

Guided independent study of special topics.

**[422 Three Ages of Theater (also Comparative Literature 422)]**  
4 credits. Not offered 1990–91.]

**[429–430 Honors Work in French]**

429, fall; 430, spring. 4 credits each term, with permission of the adviser. Open to juniors and seniors. Consult the director of the honors program, A. Berger.

**[435 Césaire et Lautremon]**  
4 credits. Not offered 1990–91.]

**[436 Francophone African Fiction (also French 636)]**  
4 credits. Not offered 1990–91.]

**[438 La Poésie de la Négritude (also French 638)]**  
4 credits. Not offered 1990–91.]

**[439 Oral and Written Traditions in Africa (also Society for the Humanities 439 and Comparative Literature 439)]**  
Fall. 4 credits.

M 2:30–4:25. J. Ngate.

Organized around but not limited to two major African epics, *Soundjata* and *Chaka*, this course will enable us to investigate the nature, the validity, and the implications of many francophone African writers' claims to being modern versions of the *griots* of the oral tradition. Reading knowledge of French recommended.

**[440 African Cityscapes: Urbanization and Its Literary Representations (also Society for the Humanities 440 and Comparative Literature 440)]**

Spring. 4 credits.

F 12:20–2:15. J. Ngate.

The course will seek to make sense of the evolving fate of the city in African literature in French: from being presented almost exclusively as a deathtrap for the colonized, the city has now become that ambiguous space in which it is increasingly difficult to say what it means to be African. Reading knowledge of French recommended.

**[447 Medieval Literature]**

Fall. 4 credits. Prerequisite: French 201 or permission of instructor.

T 2:30–4:25. A. Colby-Hall.

This course is designed to give students facility in reading Old French and an appreciation of two major genres of medieval French literature: the epic and the theater.

**[448 Medieval Literature]**  
4 credits. Not offered 1990–91. Next offered 1992–93.]

**[452 Theatre in Sixteenth-Century France]**  
4 credits. Not offered 1990–91.]

**[453 Masterpieces of French Renaissance Prose]**  
4 credits. Not offered 1990–91.]

**[454 Montaigne]**  
4 credits. Not offered 1990–91.]

**[455 Rabelais]**  
4 credits. Not offered 1990–91.]

**[456 Diverse Poetries in Sixteenth-Century France]**  
4 credits. Not offered 1990–91.]

**458 Baroque Poetry in France**

Spring. 4 credits. Conducted in French.

T R 2:55-4:10. K. Perry.

Through the works of Théodore Agrippa d'Aubigné, Théophile de Viau, Saint-Amant, and others, we will explore the social and aesthetic reasons for the genesis and development of such a revolutionary mode of writing. What is the place of such a movement in French cultural history; in particular, how does this movement confront political and religious issues? How do these poets situate themselves in relation to *libertin* philosophy? What is the place of violence and horror in baroque aesthetics and ideology? We will explore how baroque writers develop a new poetics to cope with such issues.

**[459 Petrarchism and the Lyric Experience in France (also French 659)]**

4 credits. Not offered 1990-91.]

**[460 The Moralism Tradition (also French 660)]**

4 credits. Not offered 1990-91.]

**[461 The Theater of Molière]**

4 credits. Not offered 1990-91.]

**[462 Racine]**

4 credits. Not offered 1990-91.]

**[470 Perspectives on the Age of Enlightenment]**

4 credits. Not offered 1990-91.]

**[473 Diderot and the Enlightenment]**

4 credits. Not offered 1990-91.]

**[485 Reading Workshop: The Short Story]**

4 credits. Not offered 1990-91.]

**[487 Rimbaud and the Question of Reading]**

4 credits. Not offered 1990-91.]

**[488 Baudelaire]**

4 credits. Not offered 1990-91.]

**493 French Feminisms (also Women's Studies 493)**

Fall. 4 credits. Conducted in English.

T R 1:25-2:40. N. Furman.

In this course we will examine the political, theoretical, and literary concerns of contemporary French writers who have addressed "*la question de la femme/la question du féminin*." Readings will include representative texts by Simone de Beauvoir, Monique Wittig, Julia Kristeva, Jacques Lacan, Luce Irigaray, Jacques Derrida, and Hélène Cixous.

**[494 Surrealism]**

4 credits. Not offered 1990-91.]

**[496 The Early Twentieth-Century French Novel (also Comparative Literature 496)]**

4 credits. Not offered 1990-91.]

**[497 Poetry since Baudelaire]**

4 credits. Not offered 1990-91.]

**[498 Dostoevsky, Mann, and Gide (also Comparative Literature 498)]**

4 credits. Not offered 1990-91.]

**[499 Fiction and Film in France (also Comparative Literature 499)]**

4 credits. Not offered 1990-91.]

**[596 Colette: Can She Be a Subject of Masculine Discussion in the '80s?]**

4 credits. Not offered 1990-91.]

**[607 Proseminar: The Interpretation of Texts]**

4 credits. Not offered 1990-91.]

**[608 Proseminar]**

4 credits. Not offered 1990-91.]

**[618 Music and Poetry in France: Late Middle Ages and Renaissance (also French 318 and Music 373/673)]**

4 credits. Not offered 1990-91.]

**[628 "Un coup de dés": Mallarmé and His Critics]**

4 credits. Not offered 1990-91.]

**629 History of the French Language (also French 401 Modern Languages)**

Spring. 4 credits. Prerequisite: Qualification in French and Linguistics 101, or permission of instructor.

M W F 2:30. A. Colby-Hall.

Diachronic development of French from Latin, with emphasis on phonological and morphological change. Course work includes problems in reconstruction, textual analyses, discussions of theoretical topics, and external history.

**[636 Francophone African Fiction (also French 436)]**

4 credits. Not offered 1990-91.]

**[638 La Poésie de la Négritude (also French 438)]**

4 credits. Not offered 1990-91.]

**639-640 Special Topics in French Literature**

639, fall; 640, spring. 4 credits each term. Staff.

Guided independent study for graduate students.

**[644 Medieval Seminar: The Old French Epic]**

4 credits. Not offered 1990-91.]

**[646 Medieval Seminar: Villon]**

4 credits. Not offered 1990-91.]

**[648 Medieval Seminar: Le Roman de la Rose]**

4 credits. Not offered 1990-91.]

**[659 Petrarchism and the Lyric Experience in France (also French 459)]**

4 credits. Not offered 1990-91.]

**[660 The Moralism Tradition (also French 460)]**

4 credits. Not offered 1990-91.]

**[661 Racine and His Critics]**

4 credits. Not offered 1990-91.]

**662 Racine**

Fall. 4 credits. Conducted in French.

T 2:30-4:25. P. Lewis.

Racine's plays will be read in chronological order; extracts from his other works will be considered occasionally, in relation to the theater. The principal emphasis will fall on four major tragedies—*Andromaque*, *Britannicus*, *Iphigénie*, and *Phèdre*—to which two full sessions will be accorded. Discussion will address diverse critical interpretations of the Racinian corpus and of these four plays, including phenomenological (Starobinski), psychoanalytic (Mauron and Doubrovsky), semiotic (Pavel), structuralist (Barthes), sociological (Goldmann), theatrical (Schärer), and thematic (Hubert) perspectives.

**[663 La Fontaine and Perrault: Fables, Tales, and Narrative Traps]**

4 credits. Not offered 1990-91.]

**[665 The Emergence of Aesthetics]**

4 credits. Not offered 1990-91.]

**[666 Seventeenth-Century Seminar: Moralities in Fiction: The Classical Moment (also Comparative Literature 666)]**

4 credits. Not offered 1990-91.]

**[669 Seventeenth-Century Seminar: Illusion and Representation]**

4 credits. Not offered 1990-91.]

**676 The Libertine Novel**

Spring. 4 credits. Conducted in French.

W 2:30-4:25. A. Berger.

From Montesquieu and Crébillon to Sade, we will study the rise of the libertine novel in eighteenth-century France. Foucault writes that this type of novel marks the beginning of the "epoch of sexuality." We will try to understand what is at stake in this new staging of "sexuality." The assertion of the supremacy of desire over social rules and values participated in the undermining of the theological and patriarchal order. We will inquire about the extent of this process as we discuss the place and representation of women's desire in these novels.

**[679 Comedy and Philosophy in the French Enlightenment]**

4 credits. Not offered 1990-91.]

**[685 Stendhal, Balzac, Flaubert (also Comparative Literature 610)]**

4 credits. Not offered 1990-91.]

**[687 Poetry and the Threat of Modernity: The Case of Rimbaud]**

4 credits. Not offered 1990-91.]

**[688 Gérard de Nerval]**

4 credits. Not offered 1990-91.]

**689 Bohemians and Dandies**

Spring. 4 credits. Conducted in French.

F 1:25-3:20. N. Furman.

The counterculture of the nineteenth century will be studied in the works of such writers as Bertrand, Gautier, Nerval, Villiers de l'Isle-Adam, Huysmans, Valles, and Jarry.

**[690 André Gide (also Comparative Literature 695)]**

4 credits. Not offered 1990-91.]

**[691 Laughter]**

4 credits. Not offered 1990-91.]

**[692 Sartre and Genet]**

4 credits. Not offered 1990-91.]

**[693 Nineteenth-Century Seminar]**

4 credits. Not offered 1990-91.]

**[694 Surrealism]**

4 credits. Not offered 1990-91.]

**696 Proust and Mystery**

Spring. 4 credits. Prerequisite: Two French literature courses or graduate status.

M 1:25-3:20. D. Grossvogel.

If mystery is what arouses curiosity through the unexplained, the inexplicable, or merely the secret, three possibilities exist for literature: the text as discussion of ontological evidence; as rehearsal of the ontological scene; or as the education of that sense for the sake of a game. The course proposes to read hefty chunks of *A la recherche* as the focus of these three concerns and against their other forms in other kinds of literature.

## Italian

A. Grossvogel (director of undergraduate studies, 261 Goldwin Smith Hall, 255-4264), M. Migiel

### The Major

Students who wish to major in Italian should choose a faculty member to serve as a major adviser; the general plan and the details of the student's course of study will be worked out in consultation with the adviser. Italian majors are encouraged to take courses in related subjects such as history, art history, music, philosophy, anthropology, classics, linguistics, and other modern languages and literatures. While a major often occupies only the junior and senior years, it is wise for students to seek faculty advice about the major as early as possible.

Students who elect to major in Italian ordinarily should have completed Italian 201 by the end of their sophomore year. Exemptions can be made on the basis of an examination. Students majoring in Italian are expected to become conversant with a fair portion of the master-works of Italian literature, to acquaint themselves with the outlines of Italian literary history, and to develop some skill in literary analysis. To this end, students will be expected to complete successfully 32 credits of Italian literature courses at the 300 level or higher, with papers to be written in Italian or English. Required courses for the major are Italian 303, 304, and 334. Italian 402, History of the Italian Language, and 403, Linguistic Structure of Italian, may be counted toward the 32 credits required for the major (an introductory linguistics course is a prerequisite of Italian 402 and 403).

Students majoring in Italian will also be expected to acquire competence in the handling of the language. That competence may be demonstrated by passing an oral and written examination to be arranged with the adviser.

Italian majors will also be required to complete successfully two courses in related fields (for example, Italian history, Italian art history, literary theory).

Italian majors may study in Italy, generally during their junior year, under any of those study-abroad plans organized by American universities that allow the transfer of grades and credit, such as the Cornell program in Rome.

The College of Architecture, Art, and Planning maintains a program open to all qualified students attending Cornell. The program is housed in the sixteenth-century Palazzo Massimo, designed by the architect Baldassare Peruzzi, on the Corso Vittorio Emanuele, in the heart of Rome. Students may enroll for a semester in the fall or spring. Courses regularly taught at the Palazzo Massimo include Italian language (beginning and intermediate); Architecture 300, 401, 402, 500, 502, Design Studio; Architecture 338 and 399, Special Topics in Architectural History; Architecture 458, Special Projects in Design Communications; Architecture 367, Contemporary Italian Culture; Architecture 510, Thesis Introduction; Art 251, 311, 322, and 371; and History of Art 371, Renaissance and Baroque Art in Rome.

To be eligible, students must have completed the first two years of their curriculum requirements and be in good academic standing.

**Fees.** Depending on the course, a small fee may be charged for copies of texts for course work.

### Literature

Most language courses and Italian linguistics courses are offered by Modern Languages and Linguistics. Advanced language courses and all literature courses are listed below.

#### 109 FWS: Italian Literature Revisited

Fall or spring. 3 credits.

T R 11:40–12:55. M. Migiel and staff.

The permanent presence of early Italian literature in our cultural heritage results not only from the continued popularity of the original works, but also from their recurrence in later literature and art. In this course, we will read selections from early Italian literature (especially Dante's *Divine Comedy*, Petrarch's *Canzoniere*, and Boccaccio's *Decameron*) and we will study the way in which authors and artists from the Renaissance to the present day (including Shakespeare, Pasolini, Levi and Voznesenskaya) have taken early Italian literature to be a source of inspiration for their own works. We will consider the cultural, ideological, and aesthetic implications of adaptations of literary source materials. Particular attention will be given to the ways in which an artist uses literary models to interpret contemporary social and historical reality and to define his or her place in the artistic tradition. All foreign texts will be read in English translation.

#### 201 Introduction to Italian Literature

Fall or spring. 3 credits. Prerequisite: permission of instructor. Conducted in Italian.

M W F 10:10. M. Migiel and staff.

Exploration of the cultural, sociological, and aesthetic implications of Italian literary texts. Emphasis on the development of students' oral, written, and reading skills. Readings will include prose, poetry, and drama written by major Italian authors.

#### 303 Introduction to Medieval and Renaissance Literature

Spring. 4 credits. Prerequisite: 201 or permission of the instructor.

Hours to be announced. M. Migiel.

The course will focus on the major figures and texts of medieval and Renaissance literature with an eye on the wider cultural context of Italy. We will begin with readings and discussions of the poets of the Sweet New Style (Guinizelli, Cavalcanti, and Dante) and selections from Petrarch's *Canzoniere* and Boccaccio's *Decameron*. Finally we shall look at some poems of Michelangelo, one canto from Ariosto's *Orlando Furioso*, and Machiavelli's *The Prince*.

#### [304 Introduction to Modern Italian Literature

4 credits. Not offered 1990–91.]

#### [322 Italian Civilization: Literature and Regionalism

4 credits. Not offered 1990–91.]

#### [334 Dante's Divine Comedy (also Italian 634)

4 credits. Not offered 1990–91.]

#### [340 Literature and Society in the Italian Renaissance

4 credits. Not offered 1990–91.]

#### [354 Italian Humanism (also Italian 654)

4 credits. Not offered 1990–91.]

#### [357 The Italian Renaissance Epic

4 credits. Not offered 1990–91.]

#### [370 Eighteenth-Century Thought

4 credits. Not offered 1990–91.]

#### [381 Narrative of Verga, D'Annunzio, Svevo, and Pirandello (also Italian 581)

4 credits. Not offered 1990–91.]

#### [384 Early Modern Italian Autobiography (also Italian 684)

4 credits. Not offered 1990–91.]

#### 390 Literature to Cinema

Fall. 4 credits. Conducted in English.

T R 2:30–4:25. A. Grossvogel.

A study of the ways literary language has influenced Italian cinema. The films to be screened will be by Antonioni, Bertolucci, Bolognini, De Sica, Pasolini, Rossellini, Taviani, Visconti, and Zurlini. The works of literature to be read in conjunction with these films will include selections from Boccaccio's *Decameron* and from the narrative works of Bassani, Borges, Buzzati, Cortázar, Mann, Moravia, Tomasi di Lampedusa, and Verga.

#### [391 The Theater of Verga, D'Annunzio, Svevo, and Pirandello (also Italian 691)

4 credits. Not offered 1990–91.]

#### [393 Narrative and Ideology in Contemporary Italian Literature (also Italian 693 and Comparative Literature 393)

4 credits. Not offered 1990–91.]

#### [395 Readings in Contemporary Italian Fiction

4 credits. Not offered 1990–91.]

#### 399 Cinema to Literature

Spring. 4 credits. Conducted in English.

T R 2:30–4:25. A. Grossvogel.

The course will consist of a comparative study of selected films by Fellini, Antonioni, Visconti, and others and of works by major contemporary writers such as Montale, Ungaretti, Saba, Gadda, and Calvino. These authors' similarities and contrasts in invention, style, and techniques will be explored to illustrate the evolution of contemporary aesthetics in cinematography and poetry in Italy.

#### 419–420 Special Topics in Italian Literature

419, fall; 420, spring. 2–4 credits each term. Prerequisite: permission of instructor.

Staff.

Guided independent study of specific topics.

#### [427 Dante: *La Divina Commedia*

4 credits. Not offered 1990–91.]

#### 428 Dante: *La Divina Commedia*

4 credits. Prerequisite: Permission of instructor. Conducted in Italian.

T 2:30–4:25. M. Migiel.

Intensive study of Dante's *Divina Commedia*, with an introduction to relevant critical and methodological issues.

#### 429–430 Honors in Italian Literature

429 fall; 430, spring. 4 credits each term. Limited to seniors. Prerequisite: permission of instructor.

A. Grossvogel.

#### [437 Petrarch: *Canzoniere*

4 credits. Not offered 1990–91.]

#### [445 Boccaccio (also Italian 645)

4 credits. Not offered 1990–91.]



**[448 Italian Lyric Poetry, 1255–1600: The Formation of the Canon]**  
4 credits. Not offered 1990–91.]

**[458 Tasso]**  
4 credits. Not offered 1990–91.]

**472 Eighteenth-Century Italian Theater: From Melodrama to Tragedy**  
Fall. 4 credits.  
T R 11:40–12:55. A. Grossvogel.  
The readings for this course will focus on the dramatic works of Goldoni and Alfieri, the two major Italian playwrights of the eighteenth century. Carolo Gozzi's *fiabe*, Metastasio's melodrama, Chiari's parodies, and the last sparks of the *commedia dell'arte* will also be examined to illustrate the pervasive character of dramatic expression in Italian literary and artistic life of the time. Attention will be given to Goldoni's role in the reform of the theater and to the bitter controversy he had to face.

**[474 Opera (also German 374/674 and Music 374/674)]**  
4 credits. Not offered 1990–91.]

**[485 The Nineteenth Century: Foscolo, Manzoni, Leopardi]**  
4 credits. Not offered 1990–91.]

**[488 Giacomo Leopardi and Nineteenth-Century Poetry]**  
4 credits. Not offered 1990–91.]

**[495 Readings in Contemporary Italian Fiction]**  
4 credits. Not offered 1990–91.]

**[496 Futurism in Italy and Europe]**  
4 credits. Not offered 1990–91.]

**[497 Modern Italian Poetry: D'Annunzio to Montale]**  
4 credits. Not offered 1990–91.]

**498 Eugenio Montale and Contemporary Italian Poetry**  
Spring. 4 credits.  
W 2:30–4:25. A. Grossvogel.  
A reading of Montale's poetry—*Ossi di seppia*, *Le Occasioni*, *La Bufera e altro*, *Satura*, *Diari*—against the screen of the poetry of some of his contemporaries; D'Annunzio, Ungaretti, Saba, Quasimodo.

**[557 The Italian Renaissance Epic]**  
4 credits. Not offered 1990–91.]

**[561 Narrative of Verga, D'Annunzio, Svevo, and Pirandello (also Italian 381)]**  
4 credits. Not offered 1990–91.]

**[634 Dante's Divine Comedy (also Italian 334)]**  
4 credits. Not offered 1990–91.]

**639–640 Special Topics in Italian Literature**  
639, fall; 640, spring. 4 credits each term.  
Staff.

**[645 Boccaccio (also Italian 445)]**  
4 credits. Not offered 1990–91.]

**[654 Italian Humanism (also Italian 354)]**  
4 credits. Not offered 1990–91.]

**[684 Early Modern Italian Autobiography (also Italian 384)]**  
4 credits. Not offered 1990–91.]

**[691 Theater of Verga, D'Annunzio, Svevo, and Pirandello]**  
4 credits. Not offered 1990–91.]

**[693 Narrative and Ideology (also Italian 393 and Comparative Literature 393)]**  
4 credits. Not offered 1990–91.]

#### Related Courses in Other Departments

**Society for the Humanities 421 Riffraff of the Renaissance**  
Fall.

#### Romance Studies

##### Literature

**[361 The Culture of Early Renaissance (also Comparative Literature 361 and History of Art 350)]**  
4 credits. Not offered 1990–91.]

**[404 Cogito Ergo Sum: Thought and Existence from Descartes to Sartre (also French 404 and Comparative Literature 404)]**  
4 credits. Not offered 1990–91.]

**[431 Isms: General Concepts in Modern Cultural History (also Comparative Literature 431)]**  
4 credits. Not offered 1990–91.]

**[459 Being, God, Mind: Key Terms of Western Thought from Plato to Vico (also Comparative Literature 369)]**  
4 credits. Not offered 1990–91.]

**[460 Biology and Theology: Approaches to the Origin of Life, Evolution, Heritage and Freedom, Sexuality and Death (also Comparative Literature 460)]**  
4 credits. Not offered 1990–91.]

**497 Heidegger on Language, Art, and Literature (also Comparative Literature 497)**  
Fall. 4 credits.

T 2:30–4:25. C. Arroyo.  
A study of texts such as *Language*, *The Origins of the Work of Art*, *The Letter on Humanism*, and others that have been influential in contemporary criticism.

##### Spanish

D. Castillo, U. J. DeWinter, J. W. Kronik, A. Monegal, C. Moron-Arroyo, J. Piedra, M. Stycos, J. Tittler (director of undergraduate studies, 286 Goldwin Smith Hall, 255-4048)

##### The Major

The major is designed to give students proficiency in the oral and written language, to acquaint them with Hispanic culture, and to develop their skill in literary and linguistic analysis. Satisfactory completion of the major should enable students to meet language and literature requirements for teaching, to continue with graduate work in Spanish or other appropriate disciplines, or to satisfy standards for acceptance into the training programs of the government, social agencies, and business concerns. A Spanish major combined with another discipline may also allow a student to undertake preprofessional training for graduate study in law or medicine. Students interested in a Spanish major are encouraged to seek faculty advice as early as possible. For acceptance into the major, students should consult the director of undergraduate studies in Spanish—Professor Tittler (286 Goldwin Smith Hall)—who will admit them to the major and choose an adviser from the Spanish faculty. Spanish majors will then work out a plan of study in consultation

with their advisers. Previous training and interests as well as vocational goals will be taken into account when the student's program of courses is determined.

Spanish 201 and 204 or 212 (or equivalent) are prerequisite to entering the major in Spanish. All majors will normally include the following core courses in their programs:

- 1) Spanish 315–316–318
- 2) Spanish 311 and 312 (or equivalent)

Spanish majors have great flexibility in devising their programs of study and areas of concentration. Some typical options of the major are:

- 1) Spanish literature, for which the program of study normally includes at least 20 credits of Spanish literature beyond the core courses. Literature majors are strongly urged to include in their programs courses in all the major periods of Hispanic literature.
- 2) A combination of literature and linguistics.
- 3) Either of the above options with certain courses in other disciplines counted toward the major. Whichever option a student chooses, he or she is encouraged to enrich the major program by including a variety of courses from related fields or by combining Spanish with related fields such as history, philosophy, sociology, anthropology, art, music, Classics, English, comparative literature, and other foreign languages and literatures. The interdepartmental programs in Latin American Studies and Hispanic American Studies sponsor relevant courses in a variety of areas.

The J. G. White Prize and Scholarships are available annually to students who achieve excellence in Spanish.

For the major in Spanish linguistics, see Modern Languages and Linguistics—Spanish.

**Study abroad in Spain.** Cornell and the University of Michigan cosponsor an academic year in Spain program. Students enrolled in this program spend the first four weeks before the fall semester begins in a residential college located on the campus of the University of Madrid, where they take a course in Spanish language and contemporary society and take advantage of special lectures and field trips in Madrid and Castile. This course carries three credits. In early October the program moves to Seville, where students enroll in as many regular classes at the University of Seville as their language competency and general education permit. Their academic work is supplemented by courses designed explicitly for the program by Seville faculty, as well as a seminar regularly offered by the resident director, who is chosen from the faculty of either Cornell or Michigan. The special courses normally include history of art and architecture, Spanish composition and syntax, and modern Spanish history. In Seville students live with selected families or in a few cases in "colegios mayores." Cornell-Michigan also maintains a center in Seville, which is used by students for special seminars, tutorials, lectures, and informal gatherings.

Applicants are expected to have attained at least proficiency in Spanish prior to departure. Students are strongly encouraged to study abroad for the entire year rather than for one semester. Students interested in the study abroad program should consult with the Cornell Abroad office for further information.

**Honors.** Honors in Spanish may be achieved by superior students who want to undertake guided independent reading and research in an area of their choice. Students in the senior year select a member of the Spanish faculty to supervise their work and direct the writing of their honors essays (see Spanish 429–430).

**Fees.** Depending on the course, a small fee may be charged for film use or for copies of texts for course work.

### Language

Most language courses and Spanish linguistic courses are offered by Modern Languages and Linguistics. Advanced language courses and all literature courses are listed below.

*Note: Students placed in the 200-level courses have the option of taking language and/or literature courses; see listing under Spanish 201 for description of the literature course that may be taken concurrently with the 203–204 (offered by Modern Languages and Linguistics) or 211–212 language courses described below.*

**[211 Intermediate Spanish]**  
3 credits. Not offered 1990–91.]

**[212 Intermediate Spanish]**  
3 credits. Not offered 1990–91.]

### 311 Advanced Composition and Conversation

Fall. 4 credits. Prerequisite: Spanish 204 or 212 or equivalent.

M W F 10:10, A. Monegal, or M W F 12:20, M. Stycos.

Advanced language skills, developed through reading, grammar review, and intensive practice in speaking, writing, and translation. Analysis of present-day Spanish usage in a wide variety of oral and written texts.

### 312 Advanced Composition and Conversation

Spring. 4 credits. Continuation of Spanish 311 but may be taken separately. Required of Spanish majors.

M W F 12:20, M. Stycos, or T R 11:40–12:55, A. Monegal.

Readings and class discussion will focus on the stylistic analysis of modern texts. Increased emphasis, through weekly essays, on students' development of an effective Spanish prose style.

### Literature

#### [105 Freshman Seminar. *Paradise Lost: Biculturalism in America* (also English 168)]

3 credits. Not offered 1990–91.]

#### [106 Freshman Seminar: *Searching for Self in Hispanic Fiction*]

3 credits. Not offered 1990–91.]

#### 107 Freshman Seminar: *The Literature of American Hispanic/Ethnic Women Writers*

Fall. 3 credits.

T R 11:40–12:55. L. Carrillo.

What does it mean to be both female and ethnic in twentieth-century America? How have American women writers of Mexican,

Puerto Rican, African, and Asian heritages responded to both their traditional ethnic cultures and to the broad Anglo-Saxon, Protestant culture in which they have had to live and breathe? We will read a sampling of literature written by representative ethnic women writers to examine ways in which they have presented the theme of the interaction between traditional ethnic culture and the American tradition in defining the female ethnic experience. We will consider such topics as the impact of language, gender roles, family, and church upon women of color, together with the mechanisms that evolve to settle the often competing demands of each cultural tradition. Readings may include such works as Nicholasa Mohr's *Rituals of Survival*; Sandra Cisneros's *The House on Mango Street* or Helena Maria Viramontes' *The Moths and Other Stories*; Toni Morrison's *Sula*; Amy Tang's *The Joy Luck Club* or Maxine Hong Kingston's *The Woman Warrior*. Writing assignments will consist of analytical essays on the readings.

#### [109 Freshman Seminar: *Revolution and Literature in Latin America*]

3 credits. Not offered 1990–91.]

#### 119 Freshman Seminar: *Letters From El Barrio: A Sense of Place in Hispanic American Fiction*

Spring. 3 credits.

T R 11:40–12:55. L. Carrillo.

In this seminar we will focus upon the portrayal of "el barrio"—the Hispanic American neighborhood/community—as a potent sense of place in Puerto Rican, Cuban, and Mexican American/Chicano fiction. Our concern will be to analyze and critique the portrayal of both rural and urban fictional barrios, from the Texas valley to New York's Spanish Harlem and Miami's Little Havana, as these locales affect such literary elements as language, imagery, character presentation/motivation, and narrative structure. Discussions will center on an analysis of the choices each writer makes as she or he creates a vision of the Hispanic community. Readings from works such as Piri Thomas's *Down These Mean Streets*, Nicholasa Mohr's *Nilda* or *In Nueva York*, Sandra Cisneros's *House on Mango Street*, Denise Chávez's *The Last of the Menu Girls*, Tomás Rivera's "....And the Earth Did Not Part," and Roberto Fernández's *Raining Backwards*. Written work will involve critical/analytical essays of the readings.

#### 125 Freshman Writing Seminar: *The City in Hispanic Novels*

Fall or spring. 3 credits.

Fall: M W F 1:25. Spring: M W F 10:10. D. Castillo and staff.

The recent boom in Hispanic fiction has frequently been accompanied by a shift in focus from rural to urban concerns. We will tour several representative Hispanic cities—New York, Mexico City, Havana, Buenos Aires—through careful reading (in English translation) of novels by Carlos Fuentes, G. Cabrera Infante, Manuel Puig, Julio Cortázar, Piri Thomas, and Juan Goytisolo. Supplementary materials may include maps, tourist guides, and newspapers.

#### [126 Freshman Seminar: *The Complex Fate—Self-Identity in the Literature of United States Hispanic and Other Ethnic Groups*]

3 credits. Not offered 1990–91.]

#### [130 Freshman Seminar: *Old World, New World—The Discovery and Conquest of America in Hispanic Literature*]

3 credits. Not offered 1990–91.]

#### 201 Introduction to Hispanic Literature

Fall or spring. 3 credits. Prerequisite: qualification in Spanish or permission of instructor. The course is divided into small sections and is conducted mainly in Spanish. (Fulfills both the language proficiency requirement and, followed by a 300-level Spanish literature course, the humanities distribution requirement. The literature course that normally follows Spanish 201 is either 315, 316, or 318.)

Fall: M W F 9:05, 11:15, 12:20 or T R 10:10–11:25. Spring: M W F 9:05, 10:10, 11:15 or T R 10:10–11:25. M. Stycos and staff.

An intermediate reading course designed to improve reading, writing, speaking, and comprehension skills in Spanish through the reading and discussion of contemporary literary works of various genres (narrative prose, drama, poetry) from Spain and Spanish America. Emphasis is placed on the development of fluency in reading and of critical and analytical abilities. The cultural, sociological, and aesthetic implications of texts by authors such as Borges, Cortázar, Fuentes, García Márquez, García Lorca, and Cela are considered.

#### [313 Spanish Civilization]

4 credits. Not offered 1990–91.]

*Note:* Spanish 315, 316, 317, and 318 can be taken in any order. Prerequisite: Spanish 201 or 4 years of high school Spanish or permission of instructor.

#### 315 Readings in Sixteenth- and Seventeenth-Century Hispanic Literature

Spring. 4 credits. Prerequisite: Spanish 201, four years of high school Spanish, or permission of instructor. This course is not a prerequisite for Spanish 316 or 318.

T R 10:10–11:25. C. Arroyo.

Readings and discussion of representative texts of the period from both Spain and her colonies in the New World: Garcilaso de la Vega, Lazarillo de Tormes, San Juan de la Cruz, Cervantes, Lope de Vega, Calderón, and others.

#### 316 Readings in Modern Spanish Literature

Fall. 4 credits. Prerequisite: Spanish 201 or 4 years of high school Spanish or permission of instructor. Taught in Spanish.

M W F 1:25 or T R 10:10–11:25 or T R 1:25–2:40. J. Tittler and staff.

Readings and discussion of representative texts from Spain from the romantic period to the present. Bécquer, Galdós, Unamuno, García Lorca, Cela, and others.

#### 317 Readings in Colonial Spanish-American Literature

Fall. 4 credits.

T R 2:55–4:10. J. Piedra.

Early masterpieces of Spanish American literature from the "chronicles of discovery" to the first novels. The paradoxical relationship between the historical and literary forms, as well as the serious and the humorous contents, that characterizes writings from the journals of Columbus to those of the pícaros.

**318 Readings in Spanish-American Literature**

Spring. 4 credits.

M W F 12:20, J. Piedra; T R 8:40–9:55, J. Tittler; or T R 1:25–2:40, D. Castillo.

Readings and discussion of representative texts of the nineteenth and twentieth centuries from Spanish America: Darío, Borges, Neruda, Paz, Cortázar, García Márquez, and others.

**[323 Readings in Latin American Civilization**

4 credits. Not offered 1990–91.]

Note: The prerequisite for the following courses, unless otherwise indicated, is Spanish 315, 316, or 318, or permission of instructor.

**332 The Modern Drama in Spanish America**

Fall. 4 credits. Conducted in Spanish.

T R 1:25–2:40, J. Kronik.

A study of significant plays from several Spanish-American countries, including Puerto Rico, with emphasis on the contemporary scene. Consideration will be given to the tensions between the expression of a Spanish-American social identity and the influence of vanguard currents such as the absurd, the epic theater, and the theater of cruelty.

**[333 The Spanish-American Short Story**

4 credits. Not offered 1990–91.]

**[345 Contemporary Spanish-American Novel**

4 credits. Not offered 1990–91.]

**[346 Hispanic Caribbean Culture and Literature**

4 credits. Not offered 1990–91.]

**347 Spanish America in Black and White**

Fall. 4 credits.

T R 10:10–11:25, J. Piedra.

This course explores the relationship between "black" and "white" cultures in Spanish America, as well as the application of neo-African cultural strategies to the study of not necessarily Afro-conscious Spanish American literature from the twentieth century.

**[351 Spanish Drama of the Golden Age**

4 credits. Not offered 1990–91.]

**[356 Spanish Lyric Poetry of the Golden Age**

4 credits. Not offered 1990–91.]

**[368 The Birth of the Novel in Spain**

4 credits. Not offered 1990–91.]

**[375 The Picaresque Novel in European Perspective**

4 credits. Not offered 1990–91.]

**[376 The Contemporary Spanish Novel**

4 credits. Not offered 1990–91.]

**[385 Studies in Spanish Realism and Naturalism**

4 credits. Not offered 1990–91.]

**[389 The Generation of 1898**

4 credits. Not offered 1990–91.]

**[390 Fiction of Modern Hispanic Women (also Women's Studies 390)**

4 credits. Not offered 1990–91.]

**[391 The Post-Civil War Drama in Spain**

4 credits. Not offered 1990–91.]

**[392 The Spanish Vanguard Theater: Lorca and Valle-Inclán**

4 credits. Not offered 1990–91.]

**393 Modern Spanish Short Fiction**

Fall. 4 credits. Conducted in Spanish.

M W F 12:20, A. Monegal.

This course will study the evolution of the short story in Spain, from the nineteenth century to the present, both as an autonomous, though marginal, tradition and in relation to other forms of prose writing that determine its definition as a genre, in particular poetic prose and the short novel. Readings include works by Bécquer, Clarín, Pardo Bazán, Valle-Inclán, Unamuno, Gómez de la Serna, Larrea, Cernuda, Aub, Ayala, Delibes, Aldecoa, Matute, Martín Gaité, Goytisolo, Puértolas, and Fernández Cubas.

**394 Trans-Atlantic Renaissance (also Comparative Literature 394)**

Spring. 4 credits.

M W F 2:30, J. Piedra.

A comparative look, in English, at Renaissance masterpieces from Europe and Spanish America, according to the following themes: Mapping Strategies (Vespucci, Columbus); Epic Proportions (Camões, Silvestre de Balboa); Conciliatory Manners (Castiglione, Inca Garcilaso); Suspicious Natures (Lope, Bernal); Cultural Imperatives (Montaigne, Torquemada); Dictatorial Blueprints (Macchiavelli, Cortés); Shipwrecking States (Shakespeare, Sigüenza y Góngora).

**[395 The Novel in Spain after the Civil War**

4 credits. Not offered 1990–91.]

**[396 Modern U.S.-Hispanic Prose Fiction**

4 credits. Not offered 1990–91.]

**397 Colombian Literature**

Spring. 4 credits. Prerequisite: Spanish 318 or equivalent. Conducted in Spanish.

T R 11:40–12:55, J. Tittler.

Readings from the rich Colombian tradition will include such renowned texts as Isaacs' *María*, Rivera's *La vorágine*, and García Márquez's *El amor en los tiempos del cólera*, as well as works by authors of national prominence, such as León de Greiff, Porfirio Barba-Jacob, Enrique Buenaventura, Alvaro Cepeda Samudio, and Gustavo Álvarez Gardeazábal. Several "Neo-Colombian" (U.S. Hispanic) authors, such as Jaime Manrique, Silvio Martínez Palau, and Andrés Berger, will also be included.

**[398 Post-Revolutionary Mexican Novel**

4 credits. Not offered 1990–91.]

**[399 Spanish Film**

4 credits. Not offered 1990–91.]

**[415 The Black Within: Hispanic Race and Literature**

3 credits. Not offered 1990–91.]

**419–420 Special Topics in Hispanic Literature**

419, fall; 420, spring. 2–4 credits each term.

Prerequisite: permission of instructor.

Staff.

Guided independent study of specific topics. For undergraduates interested in special problems not covered in courses.

**429–430 Honors Work in Hispanic Literature**

429, fall; 430, spring. 4 credits each term.

Limited to seniors. Prerequisite: permission of instructor.

J. Piedra.

**[440 Medieval Spanish Literature**

4 credits. Not offered 1990–91.]

**[450 Literature of Conquest**

4 credits. Not offered 1990–91.]

**451 Spanish Theater of the Golden Age**

Fall. 4 credits. Prerequisite: For graduates, juniors, and seniors. Conducted in Spanish.

T R 11:40–12:55, C. Arroyo.

A reading of twelve classical plays, including the canonical ones, such as *El burlador de Sevilla* and *La vida es sueño*. Also discussion on the origins of the Spanish "comedia" and of Lope de Vega's *Arte nuevo de hacer comedias*.

**[455 Cervantes: Don Quixote**

4 credits. Not offered 1990–91.]

**[466 Golden-Age Spanish Short Fiction**

4 credits. Not offered 1990–91.]

**[469 Mystics and Moralists**

4 credits. Not offered 1990–91.]

**[479 Colonial Spanish-American Literature: Voices of the Colonized**

4 credits. Not offered 1990–91.]

**[481 Eighteenth- and Nineteenth-Century Spanish Drama**

4 credits. Not offered 1990–91.]

**[485 The Nineteenth-Century Spanish Novel: Galdós and Clarín**

4 credits. Not offered 1990–91.]

**[488 The Novel in Early Twentieth-Century Spain**

4 credits. Not offered 1990–91.]

**[489 Hispanic Romanticism**

4 credits. Not offered 1990–91.]

**[490 Surrealism in Spain**

4 credits. Not offered 1990–91.]

**491 The Poetics of Tragedy in Contemporary Spanish Drama**

Spring. 4 credits. Conducted in Spanish.

T 2:30–4:25, A. Monegal.

Examines redefinitions of tragedy by three twentieth-century Spanish playwrights: Unamuno, Valle-Inclán, and García Lorca. The dramatic and theoretical formulations of their poetics will be analyzed in comparison with classical models. Reference will be made to precedents in the Spanish tradition and to later manifestations of the tragic mode in the works of Buero Vallejo, Sastre, and Arrabal.

**492 Latin-American Women Writers (also Women's Studies 481 and Comparative Literature 482)**

Spring. 4 credits. Conducted in English.

T R 10:10–11:25, D. Castillo.

This course will provide a sampler of novels and short stories by and about Latin-American women. We will look at the question of self-construction and issues such as the social and political concerns involved in a specifically Latin-American feminine identity. All works will be read in translation. (Romance Studies students should read originals of the works from the Spanish.) Authors may include writers like Luisa Valenzuela (Argentina) and Rigoberta Menchú (Guatemala), Helena Parente Cunha and Clarice Lispector (Brazil), Helena María Viramontes and the Anzaldúa/Moraga anthology *This Bridge Called My Back* (U.S.A.), and Simone Schwarz-Bart (Guadeloupe).

**[495 Gabriel García Márquez**

4 credits. Not offered 1990–91.]

**496 The Fiction of Manuel Puig**

4 credits. Not offered 1990–91.]

**[497 Spanish Poetry and Poetics]**  
4 credits. Not offered 1990-91.]**[498 Mallarmé in Latin America]**  
4 credits. Not offered 1990-91.]**[499 Borges (also Comparative Literature 499)]**  
4 credits. Not offered 1990-91.]**639-640 Special Topics in Hispanic Literature**  
639, fall; 640, spring. 4 credits each term.  
Staff.**667 Seminar in Golden Age Literature: Golden Age Poetry and Poetics**  
4 credits. Not offered 1990-91.]**669 Mystics and Moralists**  
Spring. 4 credits.

R 2:30-4:25. C. Arroyo.  
Reading of Francisco de Osuna, Spanish Erasmianism, St. Teresa of Jesus, Fr. Luis de León, and St. John of the Cross, preceded by an anthology of medieval mysticism in which we pursue the emergence of the mystical systems and terminology. The decline of mysticism in Spain around 1600 and the emergence of a moralist literature. The impact of Justus Lipsius's new humanism, "French Learning"; J. Barclay; their presence in Quevedo and Gracián. The baroque generations, the origin of the terms criticism and gusto.

**[686 Seminar in Nineteenth-Century Spanish Literature]**  
4 credits. Not offered 1990-91.]**[690 Hispanic Feminisms (also Women's Studies 692)]**  
4 credits. Not offered 1990-91.]**[694 Seminar in Modern Spanish Literature]**  
4 credits. Not offered 1990-91.]**695 Postmodern Spanish American Fiction**

Fall. 4 credit hours. Prerequisite: Permission of instructor. Conducted in Spanish.

W 2:30-4:25. J. Tittler.  
Within the context of diverse theories on the modern and the postmodern in Western literature and culture, the seminar will set in dialogue the works of such contemporary authors as García Márquez, Fuentes, Cortázar, Donoso, and Arenas. We shall be investigating the relation between the postmodern condition and such phenomena as the avant-garde, the neobaroque, the postboom, and popular culture, to name a few.

**RUMANIAN**

See Department of Modern Languages and Linguistics.

**RUSSIAN**

L. H. Babby, E. W. Browne, P. Carden (director of undergraduate studies [literature], 235 Goldwin Smith Hall, 255-8348), G. Gibian, R. L. Leed (director of undergraduate studies [language and linguistics], 302 Morrill Hall, 255-2322), N. Pollak, M. Scammell, S. Senderovich, G. Shapiro

**The Russian Major**

Russian majors study Russian language, literature, and linguistics, emphasizing their specific interests. It is desirable, although not necessary, for prospective majors to complete Russian 101-102, 201-202, and 203-204 as freshmen and sophomores, since these courses are prerequisites to most of the junior and senior courses that count toward the major. Students may be admitted to the major upon satisfactory completion of Russian 102 or the equivalent. Students who elect to major in Russian should consult both Professor Carden and Professor Leed as soon as possible. For a major in Russian, students will be required to complete (1) Russian 301-302 or 303-304 or the equivalent, and (2) 18 credits from 300- and 400-level literature and linguistics courses, of which 12 credits must be in literature in the original Russian.

Certain courses may, with the permission of the instructor, be taken for one additional hour's credit. Such courses will involve a one-hour section each week with work in the Russian language. These courses count one hour each of credit toward the 12 courses of Russian literature in the original language required for the major.

**Study Abroad**

Cornell is an affiliated institution in the Council on International Educational Exchange program for Russian language study at Leningrad State University. Cornell students also frequently go on the American Council of Teachers of Russian program in Moscow and other Russian language programs. Opportunities are available for study during the summer, a single semester, or the full year. Further information is available from Professor Wayles Browne.

**Honors.** Students taking honors in Russian undertake individual reading and research and write an honors essay.

**Fees.** Depending on the course, a small fee may be charged for photocopied texts for course work.

**Freshman writing seminar requirement.** The following courses will satisfy the freshman writing seminar requirement: Russian 103, 104, 105, and 108.

**Russian and Soviet Studies Major**

See "Special Programs and Interdisciplinary Studies," which follows the department listings.

**Russian Literature**

P. Carden (director of undergraduate studies, 235 Goldwin Smith Hall, 255-8348), G. Gibian, N. Pollak, M. Scammell (chair), S. Senderovich, G. Shapiro.

The Department of Russian Literature offers a variety of courses: some with readings in English translation, others in the original Russian, or both. The connection between Russian history, society, and literature is particularly close, so instruction and discussion in class often include a variety of topics, such as culture and intellectual history, as well as literature. Several courses are interdisciplinary, cosponsored with the departments of History, Economics, Government, Comparative Literature, etc. Students interested in majoring in Russian are strongly urged to take Russian 101-102 as soon as possible, preferably in their first year, or by their second at the latest.

Russian 203-204, offered by the Department of Modern Languages and Linguistics, and Russian 201-202, offered by the Department of Russian Literature, complete basic language instruction and introduce students to literature. A further sequence of literature courses in Russian follows Russian 202.

For further information about courses and majors, see Modern Languages and Linguistics.

**103 Freshman Writing Seminar: Classics of Russian Thought and Literature**  
Fall or spring. 3 credits.

M W F 11:15 or 12:20. Staff.  
Russian society has always seen its literature as having a mission important to the development of the nation. In this course we will examine Russian literature as it participates in the debate, whither Russia? We will look in particular at the conflict between the Slavophiles, those who thought Russia had its own unique destiny, and the Westernizers, those who thought Russia should look to the West for a model in its development. We will be reading such Russian authors as Turgenev, Dostoevsky, Herzen, and Solzhenitsyn in English translation. The course will examine the rhetorical means each author uses to make his argument. All reading is in English translation.

**104 Freshman Writing Seminar: Nineteenth-Century Russian Literary Masterpieces**

Fall or spring. 3 credits.  
Fall: M W F 9:05 or T R 10:10-11:25.  
P. Carden and staff. Spring: T R 10:10-11:25. Staff.

This course will introduce students to a broad selection of the major works of the Russian literary tradition. Our emphasis will be on what makes each work interesting as writing, what themes have been particularly interesting to Russians, and how we recognize the distinctive voice of each of the writers we are studying. Among the authors read are Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov. All reading is in English translation.

**105 Freshman Writing Seminar: Twentieth-Century Russian Literary Masterpieces**

Fall or spring. 3 credits.  
Fall: M W F 10:10-11:00. Spring: M W F 2:30-3:20. Staff.

Russian literature in the twentieth century has endured many ups and downs. At times it has produced great masterpieces of modern art. At times it has been forced into the dry mode of "socialist realism," in which it had to voice the ideas forced upon it by a totalitarian government. Russian authors have been glorified as the voice of the nation, and they have also perished in concentration camps in the far north of Siberia. In this course we will read a representative selection of these authors, including those who took the path of art, those who bent to the "social command," and those who assumed a politically dissident stance. Among the authors read will be Babel, Pasternak, Olesha, and Solzhenitsyn. All reading is in English translation.

**[108 Freshman Writing Seminar: 100 Years of Russian Fiction (1830-1930)]**  
Fall. 3 credits. Not offered 1990-91.

M W F 10:10. N. Pollak.  
What is the "truth" of the work of fiction? Native responses to Russian literature in the nineteenth and twentieth centuries have included two apparently antithetical—and



passionately proclaimed—responses to this question. According to one view, that truth lies in the ideal content of the work, its fidelity to "objective" reality, and its social relevance. According to the other view, which arose in part as a response and counterweight to the first, the truth is inseparable from the stylistic aspects of the work. In reading short fiction by such writers as Pushkin, Gogol, Tolstoy, Chekhov, and Babel, we will attempt to examine the ways each of them asserts his conception of the truth—and the ways these approaches must overlap in the determination of the complex truth that is the work of art.]

**201-202 Readings in Russian Literature**  
201, fall; 202, spring. 3 credits each term.

Prerequisites: qualification in Russian; 201 is prerequisite to 202. Open to freshmen.

Fall: M W F 1:25 or 2:30. N. Pollak.

Spring: M W F 10:10. G. Shapiro.

These courses are designed as the initial courses students take after qualification in Russian and are conducted mainly in Russian. Considerable guidance is provided, however, and there is no presumption of fluency. The goals of the courses are to introduce students to Russian literature in the original, to sample differing literary styles, and to accomplish both with minimal recourse to English in class. Several short papers in Russian and English will be assigned. Readings from nineteenth- and twentieth-century masters of prose and verse such as Pushkin, Lermontov, Tiutchev, Tolstoy, Chekhov, Babel, and Zoshchenko.

**[207 Themes from Russian Culture**

Fall. 3 credits. Not offered 1990-91.

M W 9:05. G. Shapiro.

This course is based on lectures, discussions, and audio-visual presentations (slides, tapes, films). It includes within its scope various aspects of Russian culture such as literature, art, music, religion, philosophy, and social thought from its very beginnings through the eighteenth century. The course is designed to give undergraduates a broad familiarity with the cultural traditions of the country which plays a major role in the world today. Russian culture will be presented as part of Western civilization with attention given to its distinctive character. The basic texts are literary works of moderate length in English translation.]

**208 Themes from Russian Culture II**  
Spring. 3 credits.

M W F 9:05. G. Shapiro.

This course is based on lectures, discussions, and audiovisual presentations (slides, tapes, films). It includes various aspects of Russian culture such as literature, art, music, religion, philosophy, and social thought over the last two hundred years. The course is designed to give undergraduates a broad familiarity with the cultural traditions of the country that plays a major role in the world today. Russian culture will be presented as part of Western civilization with attention given to its distinctive character. The basic texts are literary works of moderate length in English translation.

**[314 Intellectual Background of Russian Literature, 1825-1930**

Not offered 1990-91.]

**[329 Eastern Europe Today: Economics, Government, Culture (also Economics 329 and Government 326)**

Fall. 4 credits. Not offered 1990-91.

T R 2:55-4:10. G. Gibian, M. Rush, G. Staller.

Introductory interdisciplinary survey of Poland, Hungary, Czechoslovakia, and Yugoslavia since World War II, with emphasis on contemporary developments. The goals of the course are to examine differences among East European countries as well as common elements.]

**[330 The Soviet Union: Politics, Economics, and Culture (also Economics 330 and Government 330)**

Spring. 4 credits. Not offered 1990-91.

T R 2:55-4:10. G. Gibian, M. Rush, G. Staller.

Interdisciplinary survey of the U.S.S.R. since the Revolution, with emphasis on contemporary developments.]

**331 Introduction to Russian Poetry**

Fall. 4 credits. Prerequisites: Russian 202 or equivalent and permission of instructor. This course may be counted toward the 12 credits of Russian literature in the original language for the Russian major. Also open to graduate students.

T R 11:40-12:55. S. Senderovich.

A survey of Russian poetry with primary emphasis on the analysis of individual poems by major poets.

**[332 Russian Theatre and Drama**

Not offered 1990-91.]

**[333 Twentieth-Century Russian Poetry**

Spring. 4 credits. Not offered 1990-91.

T R 11:40-12:55. N. Pollak.

Close readings of lyrics by major twentieth-century poets. All reading is in Russian. Geared towards undergraduates.]

**334 The Russian Short Story**

Spring. 4 credits. Prerequisites: Russian 202 or equivalent and permission of instructor. This course may be counted toward the 12 credits of Russian literature in the original language for the Russian major. Also open to graduate students.

T R 2:55-4:10. P. Carden.

A survey of two centuries of Russian story telling. Emphasis on the analysis of individual stories by major writers, on narrative structure, and on related landmarks of Russian literary criticism.

**[335 Gogol**

Spring. 4 credits. There may be a special section for students who read Russian; if they are Russian majors, they may count this course as one in the original language. Also open to graduate students. Not offered 1990-91.

M W 2:30-3:45. Staff.

Selected works of Gogol read closely and viewed in relation to his life and to the literature of his time. Readings in English translation.]

**[350 Education and the Western Literary Tradition (also Comparative Literature 350 and College Scholar 350)**

Spring. 4 credits. Not offered 1990-91.

M W F 10:10. P. Carden.

A major philosophical tradition has conceived of education as encompassing the whole of our lives. What we should do or be is seen as the

result of every choice we make. The whole of our human contacts is understood as a school in which we form ourselves. This all-encompassing vision of education has been embodied in the works of the great philosopher-fantasts who use the forms of fiction to explore fundamental issues of education. In this course we will examine several key philosophical fantasies, among them Plato's *Republic*, Rousseau's *Emile*, and Tolstoy's *War and Peace*. Our aim will be to understand how the discourse on education became a central part of our Western tradition.]

**367 The Russian Novel**

Fall. 4 credits. Also open to graduate students. Special discussion section for students who read Russian.

T R 2:55-4:10. G. Gibian.

Realism and modernism. The prosaics of Russian writers of the nineteenth and twentieth centuries. Novels and short stories by Gogol, Turgenyev, Tolstoy, Dostoevsky, Chekhov, Solzhenitsyn, and others. Readings in English translation.

**368 Soviet Literature from Revolutionary Times to "Glasnost"**

Spring. 4 credits. Also open to graduate students. There will be a special section for students who read Russian.

T R 1:25-2:40. M. Scammell.

An introductory survey of Soviet literature, beginning with the revolutionary fervor of the twenties, continuing through the dark days of the thirties and the war years of the forties, and ending with an account of Khrushchev's "thaw," the rise of the dissident movement and the introduction of "glasnost." Writers and movements to be discussed include Mayakovsky and the Futurists; Zamyatin, Platonov and anti-utopian fiction; Gorky and Socialist Realism; Gulag literature; Pasternak; Solzhenitsyn and the dissidents; the meaning of "glasnost."

**[369 Dostoevsky (also Comparative Literature 383)**

Fall. 4 credits. Not offered 1990-91.]

**[371 Literature of the Third Wave**

Spring. 4 credits. Not offered 1990-91.

M W 11:15 plus 1 hour to be arranged.

M. Scammell.

The literature of the "third emigration." A survey of recent Russian literature by writers who have voluntarily or involuntarily left the Soviet Union during the past fifteen years. Among the authors discussed will be Solzhenitsyn, Sinyavsky, Brodsky, Zinoviev, Sokolov, Aksyonov, Vionovich, Limonov, Vladimov, Maximov, Aleshkovsky, Dovlatov, and Gorbanevskaya. Some consideration will be given to the influences of emigre publishing houses and literary magazines on the development of contemporary Russian literature and literary and political issues being debated by emigre literary circles.]

**[373 Chekhov**

Fall. 4 credits. Not offered 1990-91. A special section is offered for students who read Russian.

T R 11:40-12:55. S. Senderovich.

Reading and discussion of Chekhov's works, with emphasis on the short story. The course is designed for non-specialists as well as literature majors. A variety of approaches will be employed; informal lectures and discussions.]

**[375 Literature of the Soviet Period, 1917-1945]**

Fall. 4 credits. Prerequisite: permission of instructor. Also open to graduate students. Russian majors may do part or all of the reading in Russian by prior agreement with the instructor. Not offered 1990-91.  
T R 11:40-12:55. M. Scammell.

A survey of the development of Russian literature during the second quarter of the twentieth century, with the emphasis on attempts to create a purely Soviet literature but also taking into account the achievements of non-Soviet writers, including emigres and the so-called fellow travelers.]

**[376 Literature of the Soviet Period, 1945-1985]**

Spring. 4 credits. Prerequisite: permission of instructor. Also open to graduate students. Russian majors may do part or all of the reading in Russian by prior agreement with the instructor. Not offered 1990-91.  
T R 11:40-12:55. M. Scammell.

A survey of the development of Soviet literature after World War II, including the thaw, the literature of the Gulag, the rise of the dissident movement, and the creation of the "third emigration."]

**[379 The Russian Connection (also Comparative Literature 379)]**

Spring. 4 credits. Not offered 1990-91.  
T R 2:55-4:10. P. Carden.

We will examine the development of a Russian psychological literature of the interior self in its interrelationship with European literature. Using early examples of psychological prose such as Rousseau's *Confessions* and Benjamin Constant's *Adolphe*, we will examine the connection to Russian prose of the romantic period in Pushkin's *Queen of Spades* and Lermontov's *Hero of Our Time*. We will compare Hoffmann's and Gogol's employment of the fantastic to probe the more obscure sides of the psyche. After reading Stendhal's *Charterhouse of Parma*, we will turn to two of the most significant psychological novels of the Russian tradition, Tolstoy's *War and Peace* and Dostoevsky's *The Idiot*. All reading is in English translation.]

**[380 Soviet Dissident Literature]**

Fall. 4 credits. Not offered 1990-91.  
T R 1:25-2:40. M. Scammell.

Study of the dissident movement. Defining the meaning of the term; political dissidence and cultural and literary dissidence; and religious dissident movement. The writings of Siniavsky-Tertz, Pasternak's *Doctor Zhivago*, and other figures of the past two generations. This course is intended for students of government and society in general, not only for students of Russian literature.]

**[388 Ideas and Form in Novels of Social Inquiry (also Comparative Literature 388)]**

Spring. 4 credits. Not offered 1990-91.  
M W F 9:05. G. Gibian.

From the French Revolution to the present. Problems of relations between politics and the writer. Literary representations of conflict between political ideologies (ideas of revolution, justice, nationalism) and private needs (art, nature, love, order). Marx, Flaubert, Dostoevsky, Conrad, Trotsky, Lenin, V. S. Naipaul, Richard Wright, Solzhenitsyn, Kundera, and others. Some poetry will also be included.]

**[389 Modern Literature in Poland, Czechoslovakia, Hungary, and Yugoslavia (also Comparative Literature 389)]**

Spring. 4 credits. Not offered 1990-91.  
T R 11:40-12:55. G. Gibian

The course will focus on novels and short stories, but some consideration will also be given to drama and poetry. No knowledge of Eastern European languages is required; the reading will be done in English translation. Primary emphasis will be on the texts as literary works of art, but attention will also be given to historical and political background.]

**[390 The Power of Nationalism: Expressions of National Feelings in Politics, Literature, History, and the Arts (also Comparative Literature 390)]**

Fall. 4 credits. Not offered 1990-91.

T R 2:55-4:10. G. Gibian and others.  
The course will deal with various aspects of the general subject of national identity and feeling. In addition to studying the political phenomenon of nationalism, we will also study the roles played by national awareness in the perception of one's identity, the self-images of national character, stereotypes of national and ethnic qualities, and the relation between a sense of belonging to a nation and various other groups. Case studies of several nations and ethnic groups. There will be guest lecturers.]

**393 Honors Essay Tutorial**

Fall or spring. 4 credits.  
Hours to be arranged. Staff.

**[400 Reading the Great Tradition]**

Fall. 4 credits. Prerequisite: Russian 202 or equivalent. Recommended: a course at the 300 or 400 level in which reading has been done in Russian. This course may be counted toward the 12 credits of Russian literature in the original language required for the Russian major. Not offered 1990-91.

T R 2:55-4:10. Staff.  
The course is designed to improve the reading facility of advanced undergraduates and beginning graduate students by reading selected works of Russian literature in the original and paying close attention to their stylistic qualities. Works of contemporary Russian authors, both those officially approved and dissidents, those in the Soviet Union and those in emigration, will be read.]

**[409 Russian Stylistics]**

Fall. 4 credits. Not offered 1990-91. Also open to graduate students. Prerequisite: three years of Russian.

T R 1:25-2:40. S. Senderovich.  
A few steps beyond normative grammar. Introduction to the subtleties of idiomatic Russian on the levels of morphology, syntax, vocabulary, and phraseology. Introduction to the genres of live colloquial and written language. Development of writing skills through short assignments and their analyses. First notions of literary stylistics and their practical application.]

**[415 Postsymbolist Russian Poetry]**

Spring. 4 credits. Open to graduate students. Prerequisite: permission of instructor. Not offered 1990-91.

M W 2:30-4. N. Pollak.  
We will examine works by three poets in the first quarter of this century: Innokentij Annenskiy, the Symbolist whom the Acmeists considered their mentor; Osip Mandelstam, a founding Acmeist; and Boris Pasternak, associated, at least for a time, with the

Futurists. Through close readings of their verse, and also critical prose and manifestos, we will attempt to determine some of the general features that link poets of such diverse orientations in the years following the crisis of Symbolism. We will also outline the features that distinguish them as representative of their respective movements.]

**431 Contemporary Russian Prose**

Fall. 4 credits. Prerequisites: Russian 301-302 or 303-304, and permission of instructor. This course may be counted towards the 12 credits of Russian literature in the original language for the Russian major. Graduate students may audit the course.

T R 2:55-4:10. M. Scammell.  
Close readings of selected short stories by Babel, Zamyatin, Bulgakov, Zoshchenko, Olesha, Platonov, Kazakov, Solzhenitsyn, and others. The emphasis will be on achieving a thorough understanding of modern literary Russian and polishing reading skills. This course is specifically intended for third- and fourth-year Russian majors.

**432 Pushkin**

Spring. 4 credits. Prerequisites: Russian 202 or equivalent, and permission of instructor. This course may be counted towards the 12 credits of Russian literature in the original language for the Russian major. Also open to graduate students.

T R 11:40-12:55. G. Gibian.  
Reading in the original language and discussion of selected works by Pushkin: lyrics, narrative poems, and Eugene Onegin.

**491 Reading Course: Russian Literature in the Original Language**

Fall or spring. 1 credit each term. Prerequisite: permission of instructor.

Hours to be arranged. Staff.  
This course is to be taken in conjunction with any Russian literature course in English translation. Students will receive one credit for reading and discussing works in Russian in addition to their normal course work.

**492 Supervised Reading in Russian Literature**

Fall or spring. 1-4 credits each term.  
Hours to be arranged. Staff.

**[498 Russian Symbolism (also 698)]**

Fall. 4 credits. Not offered 1990-91.  
M 2:30-4:30 and W 2:30-3:20. P. Carden.

Around 1886 the trends in French culture represented by Baudelaire and Mallarmé crystallized into a new cultural movement, called in some of its aspects the Decadence and in others Symbolism. The new sentiments about the nature of art spread throughout Europe, drawing in England, the Scandinavian countries, Germany, and Russia. The first stirrings of Symbolism were in the ascendant in Russian cultural life and it remained the dominant force until 1910. Our task will be to study the phenomenon of Symbolism as it touched the arts in Russia, including not only literature, but dance, theater, and the visual arts. Since Symbolism was a movement that cut across national boundaries, we will study the seminal works of European art that created the climate in which Russian Symbolism was conceived and came to maturity.]

**[499 Russian Modernism (also 699)]**  
Spring. 4 credits. Not offered 1990–91.

M 2:30–4:30 and W 2:30–3:20. P. Carden.  
We will be investigating the rich and innovative period of the avant-garde in Russia from 1910 to 1925. In addition to examining outstanding works in a variety of forms, we will look at the movements, social context, and ties to the European avant-garde. Among the writers whose works we will examine are Blok, Bely, Mayakovsky, Khlebnikov, Pilnyak and Babel. We will examine theater through the Futurist performance piece, "Victory Over the Sun," through Meyerhold's productions of Mayakovsky's plays and other experimental pieces, and through mass spectacles. We will discuss the film theories of Eisenstein and Dziga Vertov and see several of their films. In the visual arts we will be examining the experiments of Larionov and Goncharova, Malevich, Kandinsky, and Tatlin. We will also look at the photomontage of Rodchenko.]

**Graduate Seminars**

**[600 Proseminar: Research Methodology in Russian Literature]**

Fall. 4 credits. Not offered 1990–91.

W 3:45–5:45. P. Carden.  
This course is intended for graduate students beyond the first-year level who want a more advanced training in research methodology. Among the topics to be covered are the research library, its resources and obstacles; bibliography of Russian literature and culture; Russian archives, what they contain and how to use them; finding and evaluating information; reading criticism analytically; evaluating different editions of an author's works; editing and revising a paper to meet professional standards of cogency and format. Each student should be working concurrently on a paper, which might be an upgrading of a seminar paper, a draft of the master's essay, or a chapter of the dissertation.]

**[603 Graduate Seminar: Neglected Masterpieces of Short Russian Prose]**  
Spring. 4 credits.

TR 2:55–4:10. G. Gibian.  
Nineteenth- and twentieth-century works chosen according to the needs of the students enrolled. Stress on skills useful in teaching Russian literature.

**[611 Supervised Reading and Research]**  
Fall or spring. 2–4 credits. Prerequisite: permission of the department.

Hours to be arranged. Staff.

**[615 Postsymbolist Russian Poetry]**  
Not offered 1990–91.  
For description see Russian 415.]

**[617–618 Russian Stylistics I and II]**  
Not offered 1990–91.]

**[619 Seventeenth-Century Russian Literature]**

Fall. 4 credits. Not offered 1990–91.

F 2:30–4:30. G. Shapiro.  
Seventeenth-century Russian literature is often studied together with Medieval literature. Is such an arrangement justified, or does seventeenth-century literature have its own problematic that makes it worth studying separately? In scholarship the seventeenth century is referred to as the Age of Baroque. Did Muscovite Russia experience its own Baroque, and, if so, what are its unique features? These and other important issues will be addressed in the seminar. In the course of the seminar a variety of concepts, genres, and

themes characteristic for the epoch will be discussed. We will read the works of such authors as Simeon Polotsky, Silvester Medvedev, Karion Istomin, and the archpriest Avvakum.]

**[620 Twentieth-Century Russian Poetry]**  
Spring. 4 credits. Not offered 1990–91. Open to advanced undergraduates with permission of instructor.

W 3:35–5:35. N. Pollak.  
An in-depth study of the writings of selected twentieth-century poets. Authors may include Blok, Mandelstam, Pasternak, Tsvetayeva, and Khlebnikov.]

**[621 Old Russian Literature]**

Fall. 4 credits.

T 4:15–6:15. S. Senderovich.  
A survey.

**[622 Eighteenth-Century Literature]**

Spring. 4 credits. Not offered 1990–91.

T 4–6. S. Senderovich.  
Introduction to the first century of modern Russian literature. Cultural identity of the age: Baroque, Neo-Classicism, Enlightenment, Sentimentalism. Reading of representative texts of the major writers of the century: Trediakovsky, Lomonosov, Sumarokov, Novikov, Karamzin, etc. Main connections with nineteenth-century literature: roots, evolution, intertextuality.]

**[623 Early Nineteenth-Century Literature]**  
Not offered 1990–91.]

**[624 Russian Romanticism]**

Fall. 4 credits. Taught in Russian. Not offered 1990–91.

T 4:15–6:15. S. Senderovich.  
A survey of concepts, themes, genres, and main individual contributions in Russian literature of the Age of Romanticism. The Age of Romanticism encompasses the first four decades of the nineteenth century. Zhukovsky, Batiushkov, Pushkin, Baratynsky, Gogol, and Lermontov are the major representatives of this style and the most important period of Russian literature. The emphasis is on poetry, its historical and theoretical problems. It was, above all, the golden age of Russian poetry, which prepared and deeply influenced the following age of great Russian prose. Turgenev, Tolstoy, Dostoevsky, and Chekhov are full of allusions to the texts of the golden age and cannot be properly understood without it.]

**[625 Russian Realism]**

Spring. 4 credits. Not offered 1990–91. Also open to advanced undergraduates with permission of instructor.

R 3:35–5:35. P. Carden.  
A study of the development of psychological realism in Russian prose of the nineteenth century, with some attention to the poetic tradition. In addition to reading representative works, we will pay attention to the historical background of the period. We will approach the works through the critical writings of several important theorists, in particular those of Lydia Ginzburg.]

**[626 The Tradition of Russian Poetry]**

Fall. 4 credits.

F 2:30–4:30. N. Pollak.  
This course will examine a selection of poems that have been particularly important for the tradition of Russian literature in the nineteenth and twentieth centuries. Our focus will include critical and literary responses to these poems as well as close readings.]

**[630 Gogol]**

Spring. 4 credits. Not offered 1990–91. Taught in Russian.

W 4:15–6:15. G. Shapiro.  
Gogol's artistic career from his "Ukrainian" cycles to *Dead Souls*. We will examine representative works from each of the major divisions of Gogol's early work, in particular from his cycles *Evenings on a Farm near Dikanka* and *Mirgorod*, and will trace the writer's development toward his magnum opus, *Dead Souls*. Although some of the readings will be done in English to enable the class to cover a significant amount of material, the class work will be focused on close analysis of the Russian text.]

**[635 Russian Literary Criticism of the Twentieth Century (also Comparative Literature 635)]**

Fall. 4 credits.

W 3:35–5:35. P. Carden.  
A survey of twentieth-century Russian contributions to critical theory and practice. Texts by the symbolists, the formalists, the school of Bakhtin, the folklorists, and the structuralists will be read and analyzed. A reading knowledge of Russian is desirable, although alternative readings in English translation can be arranged for otherwise qualified students.

**[669 Seminar: Dostoevsky]**

Fall. 4 credits. Not offered 1990–91. Also open to advanced undergraduates.

R 4:15–6:15. G. Gibian.  
Study of representative works from various periods of Dostoevsky's life, from *Poor Folk* and *The Double* to *The Brothers Karamazov*, including some articles, speeches, and parts of *The Diary of a Writer* against the context of nineteenth-century Western European and Russian literature. A variety of critical and scholarly approaches (from Russian formalists to 1980s Western scholars) will be sampled and evaluated.]

**[671 Seminar in Nineteenth-Century Russian Literature]**

Spring. 4 credits.

W 3:35–5:35. P. Carden.  
Topic: A careful study of the Russian text of Tolstoy's *Voina i mir*, making use of the drafts of the novel and the sources used by Tolstoy. We will also consider the novel in the light of various theories of narrative.

**[672 Seminar in Twentieth-Century Russian Literature]**

Spring. 4 credits. Open to advanced undergraduates. Not offered 1990–91.]

**[673 The Russian Nabokov]**

Fall. 4 credits. Not offered 1990–91. Also open to advanced undergraduates.

R 4:15–6:15. M. Scammell.  
Vladimir Nabokov wrote much verse, several plays, numerous short stories, and nine novels in Russian before switching to English. He is a major Russian writer of the twentieth century. This seminar will examine his work in the context of modern Russian literature, concentrating in particular on the novels. Knowledge of Russian is highly desirable, but all the works discussed also exist in English translation.]

**[674 Solzhenitsyn]**

Fall. 4 credits. Not offered 1990–91.

R 4:15. M. Scammell.]

**[675 Literature of the Soviet Period, 1917-1945]**

Fall. 4 credits. Not offered 1990-91.  
W 4-6. G. Gibian.

Study of the main works as well as the chronological development of all literary genres. Twofold approach: as it looked at the time; and how it looks from the perspective of hindsight: rehabilitations and revisionisms of the "glasnost" period. From Babel and Mayakovsky to Bulgakov, Sholokov, and Zoshchenko; from Futurism through Emigration and Writing for the Drawer to Socialistic Realism.]

**[676 Literature of the Soviet Period, 1945-1985]**

Spring. 4 credits. R 4:15-6:15 p.m.  
M. Scammell.

**[698 Russian Symbolism]**

Fall. 4 credits. Not offered 1990-91.  
M 2:30-4:30, W 2:30-3:20. P. Carden.  
For course description, see 498.]

**[699 Russian Modernism]**

Spring. 4 credits. Not offered 1990-91.  
M 2:30-4:30, W 2:30-3:20. P. Carden.  
For course description, see 499.]

**[701 Proseminar: Methods in Research and Criticism]**

Not offered 1990-91.]

**SANSKRIT**

See Department of Modern Languages and Linguistics.

**SERBO-CROATIAN**

See Department of Modern Languages and Linguistics.

**SOCIOLOGY**

R. L. Breiger, chair; S. Caldwell, J. Freeman, M. Hannan, D. P. Hayes, R. McGinnis, M. McPherson, P. Moen, V. Nee, S. Olzak, B. C. Rosen, L. Smith-Lovin, D. Stark, J. M. Stycos, D. Weakliem, R. M. Williams, Jr.

The subject matter of sociology is human social organization and institutions. The Department of Sociology offers courses in social organization that include (among other issues) examination of inequality on the basis of race, ethnicity, income, and occupation; political behavior and public policy; relations and affect in small groups; and contemporary social movements for change. Courses that analyze institutions include the family, politics and questions of public policy, the analysis of voluntary organizations, and the study of networks of political and organizational action.

The Department of Sociology offers the opportunity to develop fundamental theoretical insight and advanced research skills appropriate for the study of social behavior and institutions. Graduates of the department take up careers in university, government, and business settings and in law, management, architecture, and other professions seeking men and women who demonstrate a disciplined understanding of society and social issues.

**Sociology Courses for Non-Majors**

The social sciences provide students with particularly effective ways to understand the complexities of modern life. For many students, the undergraduate years are a last opportunity to gain the insights these fields have to offer. The Department of Sociology is continuing to design an array of beginning and advanced courses that convey a broad understanding of the methods and insights of sociological analysis—courses that will be of particular interest to undergraduates who may not major in sociology. First- and second-year students should note that the introductory courses (101, 103, 104) provide substantial focus on the sociological analysis of major issues of public life. A wide selection of general education courses is available at the 200 level. Advanced undergraduates who are majors in other fields should also see, in particular, the descriptions of Sociology 310 (fall), Sociology 315 (fall), and Sociology 335 (spring), for which there are no prerequisites other than junior or senior status.

**Related Courses in Other Departments**

Students interested in sociology should consult the course lists of the other social science departments in the College of Arts and Sciences and of these other departments: Organizational Behavior (College of Industrial and Labor Relations), Human Development and Family Studies (College of Human Ecology), and Rural Sociology (College of Agriculture and Life Sciences).

**The Major**

Requirements for general sociology: (1) 101 and any other 100-level course (excluding Freshman Writing Seminar) with a 2.5 minimum grade-point average; (2) no later than the junior year, the 301 and 303 methods courses; (3) one course in the department at the 400 level or higher (491 is recommended); and (4) 20 additional credits in sociology, of which 9 may be taken in related departments if approved by the student's adviser.

**Requirements for Social Relations:** This major is offered jointly by the departments of Anthropology and Sociology. See page 318 for a description and a list of requirements.

**Requirements for honors:** Potential honor students are encouraged to begin taking the methods and statistics courses during their sophomore year and to take at least 2 credits of Sociology 491, Independent Study, during their junior year. Honors students take Sociology 495-496 during their senior year. Graduation with honors requires a cumulative average of at least B+ in all sociology courses and the successful completion of an oral defense of the honors thesis. Interested students should consult the director of undergraduate studies no later than the second semester of their junior year.

**Cornell-in-Washington program.** Qualified sociology majors may include a semester in the Cornell-in-Washington program, in which students take courses and undertake a closely supervised internship. For further information, see p. 21.

**Supervised research.** Qualified sociology majors are invited to participate with faculty members in conducting research. Such projects are usually initiated in one of two ways: the student may offer to assist the faculty member in an ongoing project, or the

student may request that the faculty member supervise the execution of a project conceived by the student. In either case the student should enroll in Sociology 491. Interested students may direct inquiries to any faculty member.

**Society and Economy Concentration**

Sociology majors or students in other disciplines who wish to prepare for graduate study in any of the social sciences or in a profession (business, management, or law) may elect to acquire a concentration in society and economy. This program is designed to provide training in economic sociology, formal organizations, and social science methods. The requirements for the concentration in society and economy are: (1) three of the following courses in economic sociology and formal organizations: 245, 324, 350, 365, 372, 444; and (2) two of the following courses in methods: 301, 420, 460. For further information, consult Professor Victor Nee, 330 Uris Hall.

**Introductory Courses****101 Introduction to Sociology**

Fall or spring. 3 credits.  
M W 11:15-12:05 plus one sec. Fall:  
S. Caldwell; spring: M. Hannan.

With a focus on public issues that might in any semester include collective violence, markets and organizations, and social policies aimed at lowering the rate of poverty, this course provides an introduction to theory and research in sociology and demonstrates how the insights and methods of sociological analysis can be brought to bear in understanding major issues of public life. The goal is to convey a sense of the interrelations between the formulation of theories about social behavior and the collection and analysis of data in order to evaluate those theories. Instead of simply describing research, this course provides "hands-on" experience in analyzing sociological problems. Students undertake guided research exercises that involve using computers to analyze actual data. No prior background is presumed; necessary skills are covered in class and section meetings.

**103 Introduction to Sociology: Microsociology**

Fall. 3 credits.  
M W F 9:05-9:55. D. P. Hayes.  
An introduction to microsociology, focusing on concepts and theory of social processes within small groups, including the family. Emphasis is on leadership, conformity, social influence, cooperation and competition, distributive justice, and micro analyses of interaction.

**104 Class, Race, and Ethnicity**

Spring. 3 credits.  
T R 10:10-11:25. S. Olzak.  
What is the relationship between race and social class? To what extent does discrimination produce barriers to achievement and attainment for African Americans, Hispanics, Asians, and other immigrants in American society? Why are some groups more likely to be the targets of ethnic and racial hostility than others? This course uses sociological analyses to answer these questions about the nature of race, ethnic, and social class in our society and others. This course is designed as an introduction to the sociology of inequality, and is primarily for freshmen and sophomores.



**[106 Family and Work**

Fall. 3 credits. Not offered 1990-91.  
T 10:10-11:25, plus one section.  
L. Smith-Lovin.

The events of the past 30 years have profoundly transformed arrangements governing love, work, and their routinization in households and employment. In this course, students will look at data from census and time use studies showing what has changed and what has remained relatively stable. Sociological theories that explain these trends will be examined. Students will have the opportunity to test their own ideas with analyses of data from a national survey. The impact of sociological ideas for public issues like child care, welfare policy, sex discrimination statutes, and comparable worth will be discussed. This course is primarily for freshmen and sophomores.]

**General Education Courses**

**202 Writing in the Social Sciences (also Writing 202)**

Fall or spring. 3 credits. Limited to 17 students. Prerequisite: at least one social science course.

Fall: T R 11:40-12:55; spring: T R 10:10-11:25. K. Hjortshoj.

This course offers students the opportunity to strengthen their writing, become more aware of the diverse writing styles and strategies used in the social sciences, and experiment with new approaches to composition and revision. Students will benefit from detailed written comments on their work and from extensive discussion of student writing in class. Initial writing and reading assignments will explore styles of description, the ways in which writers adapt their work to different audiences, the differences between academic and popular writing in a particular field, and methods of revision. Subsequent assignments will include the interpretation of primary data, the review of a documentary film, and writing based on research literature in a field of the student's choice. The instructor will hold frequent individual conferences with students to discuss finished essays and work in progress. During the semester students will write, and often revise, 8 to 10 papers—about 40 pages of finished work.

**205 Population Dynamics (also Rural Sociology 201)**

Spring. 3 credits.  
T R 1:25-2:40. J. M. Stycos.

An introduction to population studies, which includes the determinants and consequences of population change. The primary focus is on the influences of demographic dynamics on society and the economy, with emphasis on marriage, family formation, mortality, crime and deviance, migration, and marketing behavior.

**240 Personality and Social Change**

Spring. 3 credits.  
T R 1:25-2:40. B. C. Rosen.

An analysis of social and psychological factors that affect and reflect social change. Topics to be examined will include models of man and society, national character, modern melancholy, feminism, family and sex roles, industrialism, economic development, and psychocultural conflict.

**[243 Family**

Fall. 3 credits. Not offered 1990-91.  
T R 10:10-11, plus one sec. B. C. Rosen.  
A social and historical analysis of the family both in the West and cross-culturally. Specific areas examined include sex roles, socialization, mate selection, sex and sexual controls, internal familial processes, divorce, disorganization, and social change.]

**[245 Inequality in America**

Fall. 4 credits. Not offered 1990-91.  
T R 10:10-11:25. S. Olzak.

This course deals with sociological explanations for various forms of social and economic inequality, particularly inequalities associated with class and work. We will describe systems of inequality, analyze various theoretical explanations for those systems, and examine the various structures designed to reduce or eliminate inequality.]

**265 Hispanic Americans**

Spring. 3 credits (4-credit option available).  
T R 2:55-4:10. H. Velez.

Analysis of the present-day Hispanic experience in the United States. An examination of sociohistorical backgrounds as well as the economic, psychological, and political factors that converge to shape and influence a Hispanic group-identity in the United States. Perspectives are developed for understanding the diverse Hispanic migrations, the plight of Hispanics in urban and rural areas, and the unique problems faced by the different Hispanic groups. Groups studied include Dominicans, Chicanos, Cubans, and Puerto Ricans.

**277 Psychology of Sex Roles (also Psychology 277 and Women's Studies 277)**

Spring. 3 credits. Limited to 300 students. Prerequisite: an introductory psychology course.

T R 11:40-12:55. S. Bem.

This course addresses the question of why and how adult women and men come to differ in their overall life styles, work and family roles, personality patterns, cognitive abilities, etc. This broad question is examined from five perspectives: (a) the psychoanalytic perspective, (b) the biological perspective, (c) the historical and cultural evolutionary perspective, (d) the child development perspective, and (e) the social-psychological and contemporaneous perspective. Each of these perspectives is also brought to bear on more specialized phenomena relating to the psychology of sex roles, including psychological androgyny, women's conflict over achievement, the male sex role, equalitarian marriage relationships, gender-liberated child-rearing, female sexuality, homosexuality, and transsexualism.

**283 Groups and Relationships (also Psychology 283)**

Summer and winter session. 4 credits.  
Enrollment limited to ten men and ten women.  
Summer M W 7-10 p.m.; winter session: M-F 9-12 a.m. L. Meltzer.

Small groups (such as teams and committees) and dyadic relationships (such as friends and lovers) are studied via games, exercises, and demonstrations. An out-of-class group project involving self-study is an integral part of the course. The goal is increased sensitivity to group processes, heightened awareness of the effects we have on others, and an understanding of how person-to-person processes relate to larger societal phenomena.

**285 Social Psychology of Modernization**

Fall. 3 credits.  
T R 10:10-11:25. B. Rosen.

This course analyzes the changes taking place in newly industrializing countries around the world. It seeks to increase the student's understanding of the psycho-social forces that cause social change by modifying social behavior and personality. Particular attention will be paid to the roles of industrialization, social behavior, and emotional needs in the modernization process.

**Methods and Statistics Courses**

**301 Evaluating Statistical Evidence**

Fall. 4 credits.  
M W 10:10-11, plus one section.  
R. L. Breiger.

A first course in statistical evidence in the social sciences, with emphasis on statistical inference and multiple regression models. Theory is supplemented with numerous applications.

**303 Design and Measurement**

Fall. 4 credits. Prerequisite: a course in sociology.

T R 2:30-4:25. D. P. Hayes.

Foundations of sociological analysis; issues arising from using humans as data sources; the quality of our primary data; methods of its collection; research designs in wide use and their limitations; pragmatic considerations in doing research on humans, organizations, communities, and nations.

**Intermediate Courses**

**310 Sociology of War and Peace**

Fall. 4 credits.  
T R 1:25-2:40. R. M. Williams, Jr.  
Every human group, community, or society presents many examples of altruism, helping, cooperation, agreement, and social harmony. Each grouping or society also manifests numerous examples of competition, rivalry, opposition, disagreement, conflict, and violence. Both conflict and cooperation are permanent and common aspects of the human condition. Collective conflicts, especially wars and revolutions, are frequent and dramatic events. But "peace" and "war" are equally active social processes, not passive happenings. This course describes various commonly accepted but erroneous notions of the causes and consequences of war and deterrence. It deals with the major theories concerning the sources of war in international and intranational social systems. The last half of the course analyzes the modes, techniques, and outcomes of efforts to restrict, regulate, and resolve international conflicts.

**315 Sociology and Politics of Science**

Fall. 3 credits.  
T R 1:25-2:40. R. McGinnis.  
This course explores the social structure of science, career patterns of scientists, and the role of government in shaping and continuing them.

**[324 Organizations and Associations]**

Fall. 3 credits. Prerequisite: two courses in sociology. Not offered 1990-91.

TR 11:40-12:55. M. McPherson.

This course provides an overview of the literature on social organization as it bears on the formation, maintenance, and dissolution of formal organizations. These organizations are extremely diverse, ranging from large multinational firms to neighborhood improvement groups. Throughout the course we will seek to discover the theoretical similarities among these diverse forms. We will be reading from the literature on firms, unions, voluntary associations, churches, political groups, and other types of organizations. We will study how these organizations relate to one another, how individuals come to join them, and the process by which they grow and decline.]

**[335 Industrial and Post-Industrial Society]**

Spring. 4 credits. Open to juniors and seniors in any department. No prerequisites.

TR 1:25-2:40. D. Weakliem.

Service and information-based industries are steadily growing in all modern societies. Many people claim that this development fundamentally changes social structure, social conflict, politics, and culture. Others say that post-industrial society is just a continuation of industrial society. This course will explore issues concerning post-industrial society: for example, are traditional social categories such as class or religion giving way to new divisions? It will explore theories of post-industrial society and allow students to test them with data on recent changes in social conditions.

**[348 Sociology of Law]**

Fall. 4 credits.

MWF 1:25. C. Bohmer.

Legal decisions and legal practices viewed within the context of society's institutions and customs. Topics vary from semester to semester but deal with issues such as civil rights versus society's rights, variations in permissible sexual practices in different cultures, the social organization of police departments and its effects on justice and equity, changing divorce laws in relation to changes in the status of women, the role of psychiatry in the legal process, and judicial attitudes toward rape victims.

**[350 Organizations, Individuals, and Social Structure]**

Spring. 4 credits. Prerequisite: one course in sociology. Not offered 1990-91.

TR 10:10-11:25. D. Weakliem.

Organizations are composed of people, but at the same time they can be regarded as actors in their own right, distinct from their members. This course introduces recent sociological theory and research on the relations among organizations and between organizations and individuals. Topics include the reasons for organization, effects on social conflict, stratification among organizations, and the extent to which organizations represent their members' interests. Examples will be taken from firms, labor unions, and political organizations.]

**[364 Race and Ethnicity]**

Spring. 4 credits. Not offered 1990-91.

TR 1:25-2:40. S. Olzak.

This course examines the sociology of race and ethnic relations in the United States, Western Europe, South Africa, and other settings. The topics covered include the role of immigration and competition, the dynamics of upward

mobility for some (but not all) ethnic-racial groups in the United States, the sociology and politics of ethnic-racial caste systems such as apartheid in South Africa, and the dynamics of ethnic boundaries in developing countries compared to those in underdeveloped countries.]

**[365 Comparative Perspectives on Socialist Societies and Economies]**

Fall. 3 credits. Open to juniors and seniors in any department. No prerequisites. Not offered 1990-91.

W 2:30-4:25. V. Nee.

This course focuses on analyzing the relationship between state, economy, and society in socialist societies. Particular attention is given to the tensions between planning and market, equality and equity, center and locality, bureaucratic domination and individual choice, and ideology and dissent. What are the problems in state-socialist societies and what are the dynamics and limits of reform movements? What are the areas of difference and convergence in the patterns of state, market, and household relations in capitalist and socialist societies? Readings will draw primarily on case studies of the Chinese, Eastern European, and Soviet experiences.]

**[366 Socialist Societies Today]**

Spring. 4 credits.

TR 11:40-12:55. D. Stark.

This course examines the problems and prospects of restructuring the socialist societies and economies of Eastern Europe. Themes include social inequality, changing patterns of work organization, and political participation.

**[369 Contemporary Chinese Society]**

Spring. 4 credits. Not offered 1990-91.

TR 2:55-4:10. V. Nee.

This course provides an introduction to Chinese society, its social organization, and its institutions. Since 1949 the various development models China has pursued have had differing consequences for society. What effects have they had on societal change—on stratification, community development, politics, the economy, work, schooling, family life, the position of women, personal relationships, and the meaning of life and values? What lessons can we draw from the Chinese experiences in implementing state-directed social change? How do we assess their accomplishments and failures? Recent field research on China will be cited.]

**[372 Sex Discrimination: Law and Social Policy (also Women's Studies 372 and Government 306)]**

Spring. 4 credits.

MWF 10:10. C. Bohmer.

This course will cover the legal and social trends in the area of sex discrimination. It will examine the relationship between feminist consciousness and developments in gender-related constitutional law. We will discuss the meaning of sex discrimination in the context of various areas of importance and examine the role of the law in redressing or perpetuating social and legal inequities.

**[385 Personality and Social Systems]**

Spring. 3 credits. Prerequisite: one course in any social science. Enrollment limited to 20 students.

T 10:10-12:40. B. Rosen.

A discussion seminar. Perspectives will be developed for understanding personality and behavior in a cultural context. A number of theories and conceptual approaches that have

been used to understand the relationship between personality and social systems will be critically examined. Some themes in contemporary American culture will be discussed.

**Advanced Courses**

The following courses are intended for advanced undergraduates with substantial preparation as well as for graduate students in sociology and related disciplines. The normal prerequisite for all 400-level courses is one introductory course plus 301 (or an equivalent statistics course). Students who are not sure whether their background is sufficient for a particular course should consult the professor in charge.

**[405 Sociology of Emotions]**

Spring. 4 credits. Prerequisite: at least one of Sociology 101, 103, or 205. Not offered 1990-91.

M 1:25-4. L. Smith-Lovin.

The seminar examines (1) theories that explain emotional response as a function of social interaction and (2) the impact of emotional displays on social processes such as attribution, labeling, and identity maintenance. Sociological approaches to emotion are compared with psychological and biological views. Readings include classic works as well as current theory and research. Student research is an integral part of the course.]

**[420 Mathematics for Social Scientists]**

Fall. 2-4 credits.

MW 1:25-3:20; lab, F 1:25-3:20.

R. McGinnis.

Elementary matrix algebra, probability theory, and calculus.

**[426 Policy Research]**

Spring. 3 credits (4-credit option available). Prerequisite: a course in multivariate methods. Not offered 1990-91.

R 9-11. S. Caldwell.

Examines the distinctive character of that social research which is sponsored and carried out explicitly for the purpose of informing policy. Intended especially for students considering nonacademic careers. Draws frequently from case studies to probe the methodological requirements, substantive flavor, and partisan context of applied research and also to identify the institutional actors involved in its sponsorship, production, and use.]

**[444 Contemporary Research in Social Stratification]**

Fall. 4 credits. Not offered 1990-91.

R. L. Breiger.

Stratification and mobility as paired concepts requiring mutual articulation. The interplay of structure (occupational groups, labor markets, organizational demographics, social classes) and process (tracking, career trajectories, socioeconomic attainment.)

**[460 Field Research in Sociology]**

Spring. 3 credits. Not offered 1990-91.

M 3:35-5:30. V. Nee.

This course will deal with the organization and execution of studies of social life in naturally occurring settings—through participant observation and various forms of interviewing, as well as through the analysis of personal and historical documents. After a brief discussion of selected issues in the methodology and social research, attention will center on a critical examination of five published studies—to ascertain in each case just what the investigator was trying to do and the extent to which he or she succeeded. During the

semester each student will be expected to develop a detailed study design and to do whatever preliminary tasks that are necessary. This may be a doctoral dissertation, an M.A. research project, or some other inquiry on a problem of personal interest.]

#### **463 Political Sociology**

Spring. 4 credits. Prerequisite: Any two courses in sociology and/or government.  
T R 10:10–11:25. D. Weakliem.

Analyzes the relation between politics and social structure, focusing on contemporary capitalist democracies. Considers classical and contemporary views on social class and politics. Topics include ideology, voting behavior, and recent changes in class structure.

#### **[468 Women and Achievement]**

Fall. 3 credits. Not offered 1990–91.

T 1:30–3:30. B. C. Rosen.

An analysis of social and psychological factors affecting female achievement. Topics will include women in the labor force, sex differences in children's achievement, the impact of sex roles on the socialization of competence and achievement among women, and the impact of marriage and the family on career choice and occupational achievement.]

#### **491 Independent Study**

Fall or spring. 1–4 credits. For undergraduates who wish to obtain research experience or to do extensive reading on a special topic. Interested students must submit a petition, available at the departmental offices, 314–318 Uris Hall. Permission to enroll for independent study will be granted only to students who present an acceptable prospectus and secure agreement of a faculty member to serve as supervisor for the project throughout the term. Graduate students should enroll in 891–892.

#### **495 Honors Research**

Fall or spring. 4 credits. Limited to sociology majors in their senior year. Prerequisite: permission of instructor.

Hours to be arranged. Staff.

#### **496 Honors Thesis: Senior Year**

Fall or spring. 4 credits. Prerequisite: Sociology 495.

Hours to be arranged. Staff.

#### **497 Social Relations Seminar (also Anthropology 495)**

Spring. 4 credits. Limited to seniors majoring in social relations.

Hours to be arranged. T. Kirsch.

### **Graduate Core Courses**

These courses are primarily for graduate students in sociology but may be taken by other graduate students with permission of the instructor. Graduate students in sociology will normally take each of the five courses listed below, but with the concurrence of their special committees other arrangements may be made.

#### **501 Basic Problems in Sociology I**

Fall. 4 credits.

R 2:30–4:30. D. Stark.

Analysis of theory shaping current sociological research. Examination of several central problems in sociological inquiry provides an occasion for understanding tensions and continuities between classical and contemporary approaches, for indicating the prospects for unifying microsociological and macrosociological orientations, and for developing a critical appreciation of efforts to integrate theory and research.

#### **502 Basic Problems in Sociology II**

Spring. 4 credits.

T 10:10–12:05. R. Breiger.

Analysis of theoretical perspectives shaping current sociological research. A continuation of Sociology 501.

#### **505 Research Methods I: Logic of Social Inference**

Fall. 4 credits. Prerequisite: a first course in statistics and probability.

M W 2:30–4:25 plus a weekly lab.

S. Caldwell.

The stages and logic of social inquiry, using the formal language of multivariate regression, with emphasis on applications. Threats to inference—and techniques for meeting such threats—are examined within each stage of inquiry: conceptualization; measurement; design; specifying, exploring, testing and evaluating models; dissemination and influence of results. Scope includes survey, comparative-historical, and experimental styles. Work load includes weekly lab exercises with data, attention to subject-matter, articles, and a research proposal. The first course in a three-course methods sequence (505–507).

#### **506 Research Methods in Sociology II**

Spring. 4 credits. Prerequisite: Sociology 420 or 505 or equivalent.

M W 1:25–3:20. M. Hannan.

A survey of methods for analyzing sociological data, including measurement error models, confirmatory factor analysis, panel models, and general structural equation methods. Readings from the sociological research literature will illustrate various methods. Periodic assignments on micro and mainframe computers will integrate theory, method, and data.

#### **507 Research Methods in Sociology III**

Fall. 4 credits. Prerequisite: Sociology 506.

M 2:30–5. D. Weakliem.

The statistical analysis of temporal change. Major topics are time-series and event-history (survival) analysis, with some discussion of panel data.

### **Graduate Seminars**

These seminars are primarily for graduate students but may be taken by qualified advanced undergraduates who have permission of the instructor. Which seminars are to be offered any term is determined in part by the interests of the students, but it is unlikely that any seminar will be offered more frequently than every other year. The list below indicates seminars that are likely to be offered in 1990–91, but others may be added and some may be deleted. Students should check with the department before each term.

#### **509 Seminar on Sociology of Organizations (also Management NRE 509)**

Fall. 4 credits.

Hours to be arranged. J. Freeman.

This course explores current research on organizations. The current literature can be broken up into four subareas: (1) population ecology of organizations (the class will read Hannan and Freeman, *Organizational Ecology*); (2) institutional theory; (3) organizations as mechanisms of social stratification (including work on occupational mobility and internal labor markets); and (4) economics of organization (including such topics as agency theory, transaction costs, and economic approaches to collective action). These areas will be explored in depth reflecting student interest. For each, stress will be placed on the

opportunities for empirical research and limitations of operationalization.

#### **[513 Social Networks and Social Structure]**

Spring. 4 credits. Not offered 1990–91.

T 10:10–12:05. R. L. Breiger.

A critical survey of theories and techniques of structural analysis in sociology, centering on the usefulness of social network analysis in providing integration of studies at different levels of generality. Applications in the areas of the sociology of organizations, community studies, social stratification, and dependence relations among nations. Emphasis on the mutual relevance of theories and operation research procedures.]

#### **[517 The Sociology and Demography of Science and Technology]**

Spring. 4 credits. Not offered 1990–91.

F 1:25–3:20. R. McGinnis.]

#### **525 Workshop in Event Analysis**

Fall. 4 credits.

W 2:30–4:25. S. Olzak.

Research workshop for selected undergraduates and graduate students with research experience in social movements and collective action. Emphasis on data collection, research design, and data analysis of events in the study of collective action. Enrollment with permission of instructor.

#### **[551 Seminar in Collective Action]**

Spring. 4 credits. Not offered 1990–91.

R 3–5. S. Olzak.

Examination of current research and theory in collective action, including neo-Marxist, resource mobilization, breakdown, and competition perspectives of the rise and fall of collective action and social movements. Comparison of different methods of data collection and analysis, including examination of recent event-history methods applied to collective-action research.]

#### **[563 Contemporary Research in Political Sociology]**

Spring. 4 credits. Not offered 1990–91.

W 3:15–5:45. D. Weakliem.

Considers research from several theoretical perspectives in political sociology. The main focus will be on contemporary society, but some historical work may be included. Topics may include state economy relations, class structure and politics, and political ideology, among others.]

#### **[565 Seminar on Voluntary Associations]**

Spring. 4 credits. Not offered 1990–91.

T 3–5:30. M. McPherson.

This is a study of the literature on voluntary associations, which can be described as groups that are not business, government, or family. The literature reflects the extreme diversity of the subject: there are thousands of references in sociology, political science, anthropology, psychology, economics, and related areas. The course will draw on readings from a broad selection of these sources, beginning with some of the earliest references and finishing with some modern empirical and theoretical work.]

**[582 Models of Social Action]**

Spring. 4 credits. Not offered 1990-91.

T 9:30-12. L. Smith-Lovin.

This course introduces students to models that link meaning, knowledge, and social behavior. Three types of models will be explored: (1) models that relate social structure to shared knowledge; (2) production system approaches, which view knowledge as a role program; and (3) cybernetic models, which suggest that meaning and behavior can be described as a negative feedback system. Related work on knowledge representation in psychology, linguistics, and artificial intelligence will be reviewed.]

**591 Special Seminars in Sociology**

Fall and spring. 2-4 credits.

Hours to be arranged. Staff.

These graduate seminars will be offered irregularly. Topics, credit, and instructors will vary from semester to semester. Students should look at the sociology department bulletin board at the beginning of each semester for possible offerings.

**606-607 Sociology Colloquium**

Fall and spring. No credit. Required of all graduate students. Juniors and seniors are encouraged to attend.

F 2:30-5. Staff.

A series of talks representative of current research interests in sociology, given by distinguished visitors and faculty members.

**608 Proseminar in Sociology**

Fall. One credit. Required of all first-semester graduate students.

Hour to be arranged. Staff.

Discussions on the state of sociology and on the interests of the members of the field, given by members of the field.

**[620 Processes in Small Groups]**

Spring. 4 credits. Not offered 1990-91.

W 2:30-5. L. Smith-Lovin.

Analysis of processes in small groups, including communication, cohesiveness, norm development, group culture, conformity, deviance, status differentiation, leadership, power, and productivity. The seminar will cover both theory and research methods in the investigation of groups in face-to-face interaction.]

**[625 Seminar on Organization Ecology]**

Fall. 4 credits. Prerequisite: coregistration in Sociology 507 or permission of instructor. Not offered 1990-91.

M 12:20-2:15. M. Hannan.

Considers theory and research on the ecology of organizations with an emphasis on contemporary developments. Issues treated include evolution of organizational forms, interactions of competitive and institutional processes, density dependence in vital rates, niche width dynamics, and the evolution of size distributions.]

**[627 Models of Error]**

Spring. 4 credits. Not offered 1990-91.

T 2:55-5:30. M. McPherson.

This is a methods seminar that focuses on solutions to the classical problems of estimation in linear models: measurement error in the independent variables, specification error, reciprocal effects, multiple indicators, unmeasured variables, correlated errors, and the like. The goal of the course will be to gain facility in the use of now-standard solutions to these problems, such as the LISREL model, the EOS approach, and such variants as LINC.

Both mainframe- and micro-based applications will be explored. We will integrate both theory and practice by studying the underlying statistical models and applying them to standard datasets. The standard core methods sequence will be ample preparation for this course.]

**645 Seminar in Race and Ethnic Relations**

Fall. 4 credits.

T 2:30-4:25. S. Olzak.

Evaluation of recent theory and research on race and ethnic relations, including analysis of the dynamics of the ethnic boundaries, and causes and consequences of ethnic collective action. We will also examine features of ethnic stratification, mobilization, separatism, and related forms of ethnic conflict and protest movements.

**[681 Special Topics in Social Psychology]**

Fall. 4 credits. Not offered 1990-91.

T 1:25-4:10. L. Smith-Lovin.

This course will treat current research issues on the interrelationship of identity, behavior, and emotion. We will focus particularly on applying theories of interaction to small group contexts. Theoretical work that attempts to relate task and socio-emotional behavior in groups will be critiqued. The seminar will emphasize students' own theoretical work and research design.]

**[683 Social Interaction (also Psychology 683)]**

Spring. 4 credits. Not offered 1990-91.

M 2:30-5. D. P. Hayes.

Seminar: topic to be announced.]

**891-892 Graduate Research**

891, fall; 892, spring. Up to 4 credits each term, to be arranged. Prerequisite: graduate status and permission of a faculty member willing to supervise the project.

**895-896 Thesis Research**

895, fall; 896, spring. Up to 6 credits each term, to be arranged. Prerequisite: permission of thesis director.

**Summer Session**

The following courses are frequently offered in the summer session, though not necessarily by the same instructor as during the academic year. Not all of these courses will be offered in a particular summer. Information regarding these courses and additional summer session offerings in sociology is available from the department.

**101 Introduction to Sociology****103 Introduction to Sociology: Microsociology****283 Groups and Relationships****Related Courses in Other Departments****Families in Modern Society (HDFS 150)**

3 credits.

P. Moen.

**Population Policy (Rural Sociology 416)**

3 credits.

J. M. Stycos.

**The Professions: Organization and Control (ILR 427)**

4 credits.

P. Tolbert.

**SPANISH LANGUAGE**

See Department of Modern Languages and Linguistics.

**SPANISH LITERATURE**

See Department of Romance Studies

**SWAHILI**

See Africana Studies and Research Center.

**SWEDISH**

See Department of Modern Languages and Linguistics.

**TAGALOG**

See Department of Modern Languages and Linguistics.

**TAMIL**

See Department of Modern Languages and Linguistics.

**THAI**

See Department of Modern Languages and Linguistics.

**THEATRE ARTS****Theatre, Film, and Dance**

B. Levitt, Chairman; R. Archer, S. Baner, D. Bathrick, S. Brookhouse, N. Carroll, J. Chu, D. Feldshuh, D. Fredericksen, E. Gainor, P. Gill, K. Grant, P. Guion, D. Hall, M. Hays, J. Johnson, J. Moon, J. Morgenroth, C. Orr, M. Rivchin, P. Saul, J. Self, A. Van Dyke and R. Wilson

Through its courses and production laboratories, the department provides students with a wide range of opportunities in theatre, dance, and film. It offers a theatre arts major with concentration in theatre or film and a major in dance. These majors educate students in accordance with the general liberal arts ethic of the college. The programs in dance and film and the advanced undergraduate training program in theatre give some measure of professional preparation in those arts as well. The department encourages academic and studio participation by students from all disciplines and also provides the Cornell community with an opportunity to take part in its productions on an extracurricular basis.



## Theatre Arts Major

### Theatre Concentration

The theatre concentration offers studies in the history of theatre, dramatic theory and criticism, playwriting, acting, directing, design/technology, and stage management.

#### Course requirements for theatre concentration:

	Credits
1) <b>TA 240</b> and <b>TA 241</b> (two-semester introduction to theatre)	8
<b>TA 250</b> Introduction to Theatre Design and Technology	4
<b>TA 280</b> Introduction to Acting	3
2) Four laboratory courses distributed as follows:	Credits
<b>TA 151</b> Production Lab I	1-3
<b>TA 153, TA 253, or TA 353</b> Stage Management Lab I, II, or III	1-3
<b>TA 155</b> Rehearsal and Performance or <b>TA 151</b> in a different area	1-3
<b>TA 251 or TA 351</b> Production Lab II or III	1-4
3) Four courses in the area of Theatre Studies chosen in the following manner:	
Two courses selected from <b>TA 331</b> through <b>399</b>	8
Two courses selected from <b>TA 400</b> or above	8
4) Three courses (at least 9 credits) in other Theatre Arts courses chosen in consultation with the faculty advisor. Course taken to qualify for admission to the Advanced Undergraduate Training Program (described below) may also be used to fulfill this requirement.	
5) Courses in which a student receives a grade below "C" cannot be used to fulfill the requirements for a Theatre Arts major.	

### The Advanced Undergraduate Training Program

The department offers advanced training in acting, directing, playwriting, design/technology, and stage management to students who qualify on the basis of outstanding achievement in coursework. Criteria for admission to the AUTP is by the completion of the appropriate "track" of courses and invitation of the faculty. The program provides students with intensive study in theatre as well as the opportunity to collaborate with professional faculty and guest artists. Department productions will be chosen to offer a unique experience to the individual student selected for the program. (For specific requirements please see listing of courses at end of department listings.)

### Film

The study of film began in this department in the 1930s and continues to be based here. However, in the interim years it has also spread into a significant number of other departments in the college: Africana studies, anthropology, Asian studies, comparative literature, English, German studies, history, psychology, and romance studies. This proliferation of courses has been accompanied by a comparable proliferation of perspectives and faculty concerns, e.g., the relationship of national cinemas to national literatures and specific

cultures, film to myth and ideology, the use of film as historical evidence, film's efficacy as a rhetorical medium, and film's contribution to perennial issues in aesthetics, the history of the arts, and studies in cognition.

This richness of courses and perspectives is matched by the ways in which students may make film the focus of their undergraduate studies. The four currently being used are as follows: 1) concentrating on film within a Theatre Arts major; 2) constructing an individually tailored Independent Major in film (including the possibility of placing film in tandem with another medium or discipline); 3) focusing on film as a College Scholar; and 4) concentrating in Visual Studies. Students interested in option 4 should consult Marilyn Rivchin (Theatre Arts) and/or Robert Ascher (Anthropology). Students interested in options 2 or 3 should consult Don Fredericksen (Theatre Arts) and Lynne Abel (director, College Scholar and Independent Major programs). Students interested in the first option should first consult Alison Van Dyke (director, Undergraduate Studies, Theatre Arts) and then one of the department's film faculty.

#### Film Concentration Requirements

	Credits
The department's film concentration requires a total of 50 credits in film, theatre, and related courses.	
1. <b>TA 274</b> Introduction to Film Analysis	4
2. One of the following theatre courses:	
<b>TA 250</b> Fundamentals of Theatre Design/Technology	4
<b>TA 280</b> Introduction to Acting	3
<b>TA 398</b> Directing I (prerequisite TA 280)	4
3. A core of <i>three</i> film courses:	
<b>TA 375</b> History and Theory of Commercial Narrative Film	4
<b>TA 376</b> History and Theory of Documentary and Experimental Film	4
<b>TA 377</b> Fundamentals of 16mm Filmmaking	4
4. <i>Four</i> courses (16 credits) in film offered by Theatre Arts as below, or by other departments (with consent of adviser):	
<b>TA 313</b> The Japanese Film	4
<b>TA 378</b> Russian Film of 20s and French Film of 60s	4
<b>TA 379</b> International Documentary from 1945 to present	4
<b>TA 396</b> German Film	4
<b>TA 413</b> Film and Performance	4
<b>TA 450</b> Seminar on Ethnographic Film	4
<b>TA 475</b> Seminar in the Cinema I	4
<b>TA 476</b> Seminar in the Cinema II	4
<b>TA 477</b> Intermediate Film Projects	4
<b>TA 494</b> Advanced Film Production	4
<b>TA 653</b> Myth onto Film	4
5) 15 credits of related coursework in or outside of Theatre Arts (approved by adviser)	

- 6) With a grade of less than C, a course cannot be used toward the concentration

### Film Study Abroad

The College of Arts and Sciences, through this department and in consort with seventeen other colleges and universities, offers up to a full year's study at the Inter-University Center for Film and Critical Studies in Paris, France. The center's program is theoretical, critical, and historical. It is most useful to students pursuing a major in film studies and serves as an intensive supplement to their Cornell film courses. Fluency in French is required, and Theatre Arts 274, 375, and 376 are prerequisites. Inquiries should be addressed to Professor Fredericksen, Cornell's liaison with the center.

### The Dance Program

The dance program offers courses in dance technique, improvisation, composition, performance, anatomical analysis of movement, and the history, theory, and criticism of dance. Technique courses include modern dance at four levels and ballet at three levels. Other dance forms, such as tap, historical dances, Japanese Noh, Indian, Javanese, and African dance are offered on a rotating basis. Courses in ballroom dance taken through the Physical Education program supplement these offerings. Technique classes develop strength, flexibility, coordination, and the ability to perceive and reproduce phrases of dance movement with clarity of rhythm, body design, and expression. The more advanced courses require the ability to perform complex phrases in various styles. Students may earn up to four academic credits (one each semester) in level III and IV technique only (see TA 304, 306, and 308). Students may also satisfy the physical education requirement by taking dance technique classes in the dance program. The schedule for all dance technique classes is available in the main office of the Center for Theatre Arts. Registration for technique classes takes place in Teagle Hall. Students taking technique for academic credit must also register through their own colleges.

The faculty offer rehearsal and performance workshops in which they choreograph and rehearse original dances, performed in public concert. Admission to rehearsal and performance classes is by audition. Students may receive one academic credit (S-U grades only) when performing in student-faculty concerts by registering for TA 155.

### The Dance Major

To be admitted to the major, students must have completed two technique courses in modern dance or ballet (at level II or above for the performance/composition concentration) and TA 201 (dance improvisation). It is also recommended that TA 250 and Music 105, both requirements for the major, be taken before the junior year. The dance major offers two options for concentration: 1) composition and performance (studio); 2) history, theory, and criticism (academic). The following requirements are expected of majors in both concentrations.

**Prerequisites for the major:**

Two technique courses in modern dance or ballet (at level II or above for the performance/composition concentration)

**TA 201 Dance Improvisation****Requirements for the major: Credits**

**Music 105** (or substitute at the appropriate level) 3

One course in historical, tap, jazz, ballroom, or non-Western dance 0-3

**TA 210** Beginning Dance Composition and Music Resources 3

**TA 250** Fundamentals of Design and Technology 4

**TA 314-315** Western Dance History 8

**TA 418** or other 400-level academic dance course 4

**TA 155** Rehearsal and Performance 1

**Additional requirements for the studio concentration: Credits**

Two semesters each of ballet and modern dance technique 0-4

(in addition to the prerequisite)

**TA 310-311** Intermediate Projects in Dance Composition 6

**TA 312** Physical Analysis of Movement 3

**TA 410-411** Advanced Dance Composition 6

Students concentrating in the studio option will be expected to perform in at least two concerts and to present at least two of their own dances, in addition to the senior project.

**Additional requirements for the academic concentration: Credits**

A total of at least two semesters each of ballet and modern dance 0-2

techniques (including prerequisite) Dance history, theory, criticism, and aesthetics courses 8

**TA 490** (senior paper) 4

For both options, additional credits, for a total of 45, should be selected in consultation with the advisor. Of the 45 credits, at least 32 must be at the 300 level or higher.

**Department Courses****Theatre Courses**

**240 Introduction to Western Theatre I** Fall. 4 credits.

TR 10:10-11:25. E. Gainor.

A survey of the major developments in the theatre—playwriting, acting, staging, architecture, and dramaturgy—in Classical Greece and Rome, medieval and Renaissance Europe. Representative plays will be read and discussed in their theatrical context.

**241 Introduction to Western Theatre II** Spring. 4 credits.

TR 10:10-11:25. E. Gainor.

A survey of the major developments in the theatre—playwriting, acting, staging, architecture, and dramaturgy—since 1642. Among the areas considered will be French Neoclassicism, the English Restoration, the eighteenth and nineteenth centuries in England, France, and Germany and the modern international stage. Representative plays will be read and discussed in their theatrical context.

**Theatre Studies Courses****[130 American Myth in Drama**

Fall or spring. 3 credits.

MW 11:15-12:05. Staff. Not offered 1990-91.

This course examines the images of America presented on the twentieth-century stage. How do Americans view themselves? How are they seen by foreign dramatists? To what ends do dramatists use the American myth?

**140 From Script to Stage: Writing about the Theatrical Process**

Fall and spring. 3 credits.

Section 01: MWF 12:20-1:10. G. Pettit.

In this course students will explore and write about the process through which drama becomes theatre and examine how the idea of "theatre" has changed over the centuries. Students will be asked to apply the rhetorical strategies of theatre to their own essay writing. Texts will include Theatre Cornell productions.

Section 02: MWF 12:10-1:10. S. Keller.

Since the time of Plato, critics have debated the function of theatre: does it entertain, instruct, or both? The last century, however, has witnessed the proposal of a new function for theatre, that of empowering the people with a means to give voice to their desires, hopes, fears, and, above all, to their demands for political and social change. Similarly, several new production processes, such as the collective process of the Living Theatre, have emerged over the last century to challenge the traditional mode of production. Through the reading and viewing of plays and musicals by Tennessee Williams, The Living Theatre, Arthur Laurents and Stephen Sondheim, Bertolt Brecht, and others, students are required to explore in their essays questions such as What is the purpose of theatre? Does purpose determine process or vice versa? What is the role of the audience in a particular process? Texts will include Theatre Cornell productions.

**160 Vietnam and the American Theatre** Fall and spring. 3 credits Limited enrollment.

TR 10:10-11:25. B. Wright.

The Vietnam War has spawned a diverse range of dramatic texts and events. This course will investigate some central questions regarding this dramaturgy, such as: What types of theatrical events developed from the Vietnam War? How did this dramaturgy reflect attitudes about the war? How did it change over time? Where did it go in the 1970s and early 1980s? Why has there been a recent resurgence of theatrical interest in this topic? The class will investigate plays by David Rabe, Michael Weller, The Living Theatre, The Bread and Puppet Theatre, and others, in addition to various Happenings and events. Students will read and discuss the dramaturgy as the basis for their critical assignments. Additional required screenings in evening several times during the semester.

**[325 Classic and Renaissance Drama (also Comparative Literature 352)**

Spring. 4 credits.

A. Caputi. Not offered 1990-91.

A study of the major traditions in Western drama from the beginnings among the Greeks to the Renaissance in England and Spain. The work will consist of both lectures and discussions, focusing primarily on a close reading of the plays. But we shall also give attention to the physical conditions of production and to social and political contexts. Among the authors to be read will be

Aeschylus, Sophocles, Euripides, Aristophanes, Marlowe, Shakespeare, and Lope de Vega.]

**[326 European Drama, 1660 to 1900 (also Comparative Literature 353)**

Spring. 4 credits.

MWF 9:05-9:55. A. Caputi. Not offered 1990-91.

Readings from major dramatists from Corneille to Chekhov, including such authors as Moliere, Congreve, Marivaux, Goldoni, Gozzi, Schiller, Kieist, Gogol, Ostrovski, and Ibsen.]

**327 Modern Drama (also Comparative Literature 354)**

Spring. 4 credits.

MW 11:15-12:05. M. Hays.

Readings in European drama from Ibsen to the present.

**[331 The Classical Theatre**

Fall. 4 credits. Prerequisite: Theatre Arts 240 or permission of instructor. Not offered 1990-91.

An examination of major developments in the theatre—acting, staging, dramaturgy—and the historical background to these developments in Greek and Roman society. Representative plays will be read and discussed in their theatrical text.]

**[332 Medieval and Renaissance Theatre**

Spring. 4 credits. Prerequisite: Theatre Arts 240 or permission of instructor. Not offered 1990-91.

A study of theatrical styles and production modes. Topics include the medieval liturgical and secular stages, the Renaissance court and public stages on the Continent and in England and the professionalization of the theatre. Representative plays will be read and discussed in their theatrical context.]

**[333 From the Neo-classical Theatre to the Well-Made Play**

Fall. 4 credits. Prerequisite: Theatre Arts 240 or 241.

MW 2:30-4:00. M. Hays. Not offered 1990-91.

A study of theatrical styles and production modes. Topics include the English Restoration and French Neoclassical theatres, the European court theatre, romanticism in the theatre, and the rise of standing commercial theatre companies. Representative plays will be read and discussed in their theatrical context.]

**[335 The Modern and Contemporary Theatre**

Fall. 4 credits. Prerequisites: Theatre Arts 240 or permission of instructor.

TR 12:10-1:25. E. Gainor. Not offered 1990-91.

A study of theatrical styles and production modes. Examination of advances in acting, directing, design, and dramaturgy in theory and in practice from the late nineteenth century through the present day. Representative plays will be read and discussed in their theatrical context.]

**336 American Drama and Theatre (also English 336)**

Spring. 4 credits.

TR 1:25-2:40. E. Gainor.

Topic for 1991: Major dramatists of the contemporary American Theatre.

**[338 Japanese Theatre (also Asian Studies 338)]**

Fall. 3 credits. Not offered 1990-91.

W 2:30-4. K. Brazell.

A study of traditional forms of Japanese theatre. Topics will include ritual and theatre, *noh* and *kyogen*, *kabuki* and the puppet theatres, and contemporary theatrical use of traditional forms. Special emphasis will be placed on dramaturgy, acting styles, performance aesthetics, and theories of performer training.]

**400 Shakespeare: From Table to Stage**

Fall. 4 credits.

T R 12:20-2:15. E. Gainor and R. Wilson.

Prerequisites: TA 240, 280, and 281.

This class is a combination of play analysis and performance focused on the special problems encountered in Shakespeare's dramatic material. Plays to be studied are: *Richard II*, *Romeo and Juliet*, and *A Midsummer Night's Dream*. The first two weeks will be devoted to historical background, analysis of Shakespeare's language and scansion, physical and vocal exercises, and relevant literary issues. Each play will then be examined in four-week blocks, with time divided between script analysis and scene work. Requirements will include the performance of monologues and scenes and the writing of three papers. Limited to 15 students.

**415 Mass Culture (also Society for the Humanities 415)**

Fall. 3 credits.

W 2:30-5:30. J. Feuer.

This seminar will approach the subject of popular culture from the perspective of contemporary critical theory. We will focus upon the products of the U.S. mass culture industry (e.g., films, TV, music, fashion), with an emphasis on the analysis of television. We will consider both the varying theoretical approaches to mass culture and specific studies of forms of mass culture using these approaches. Case studies might include: romance novels, James Bond, teen films, TV and postmodernism, TV soap operas, MTV, made-for-TV movies, and others. The course readings will be chosen primarily from recent studies which, although theoretical in nature, focus upon *specific* cultural phenomena and often synthesize several theoretical models.

**417 Fascism and Mass Culture (also German Studies 417, Comparative Literature 417, Society for the Humanities 417)**

Fall. 4 credits. Taught in English for advanced undergraduate and graduate students.

W 3:35-5:30. D. Bathrick.

This course will study the role and evolution of mass culture in the Third Reich between 1933 and 1945. In so doing, I will seek to demonstrate why and how the Nazis were able to use forms of aesthetic representation and mass media communication to establish and maintain political control during this period. Three things will be emphasized: 1) A comparative approach that will explore the similarities and differences in the developments of mass-mediated culture during the 1930s within liberal/capitalist, communist/Stalinist, and fascist societies; 2) a focus upon the "aestheticizing of politics" (Walter Benjamin) by the Nazis as the key to understanding their appropriation of mass culture as a mode of domination; 3) and, finally, as a main part of the course, a study of individual cultural documents of mass culture. This will include careful interpretive analysis of films (*Jud Süß*, *Triumph of the Will*, *Baron*

*Munchhausen*), literature (popular novels, utopian novels, poetry, etc.), theatre (the Nazi use of the classics such as Shakespeare, Goethe, Schiller; Nazi plays) art (a study of Nazi painters—Arno Brekner, etc.).

**[431 Theory of the Theatre and Drama I]**

Fall. 4 credits. Prerequisite: some theatre history and dramatic literature work at the 300 level or permission of instructor. Not offered 1990-91.

M 2:30-4:25. M. Hays.

A study of various theories of dramatic form and theatrical presentation from Aristotle and Horace to Goethe and Schiller.]

**[432 Theory of the Theatre and Drama II]**

Spring. 4 credits. Prerequisites: Course work in theatre history or dramatic literature at the 300 level or permission of instructor.

M 2:30-4:25. M. Hays. Not offered 1990-91.

An examination of dramatic theory and its performance context from Schiller to the present.]

**[433 Dramaturgy: Play and Period]**

Spring. 4 credits.

T 12:20-2:15. E. Gainor. Not offered 1990-91.

Is there a "female dramaturgy"? What is the female tradition in the theatre? The course will explore these questions through an investigation of texts by women dramatists, including Hrotsvitha, Aphra Behn, and Caryl Churchill, as well as theory by such critics as Sue Ellen Case and Jill Dolan.]

**[434 Theatre and Society]**

Fall. 4 credits. Prerequisite: permission of instructor or some work in theatre history or dramatic literature at the 300 level. Not offered 1990-91.

M 3:30-5:00. M. Hays.

An exploration of the ways in which the theatre serves to formulate cultural and aesthetic norms.]

**435 Special Topics**

Visiting faculty.

**[438 East and West German Drama]**

Fall. 4 credits. Not offered 1990-91.

W 1:25-3:25. D. Bathrick.

This course will cover the major historical and textual developments in German theatre from the end of World War II to the present. Leading dramatists from West and East Germany, Switzerland, and Austria (Brecht, Frisch, Durrenmatt, Weiss, Hochhuth, Müller, Braun, Kroetz, Handke, and others) will be treated in the light of the political events and aesthetic-dramaturgical traditions from which they emerge and with which they are taking issue.]

**440 Issues in Community-Based Arts**

Fall. 4 credits. Limited to 25 students.

Permission of instructor.

M 4-6, hours in the field to be arranged. J. O'Neal, B. Levitt, J. Salmons-Rue.

The course combines participation in a campus or community project and a weekly seminar that will survey theories and practices in community-based arts. Community-based art forms in general, and storytelling in particular, will be explored. The process of program planning and implementation, as well as the context (cultural, demographic, organizational) will be examined in relationship to field experiences. Artists from Junebug Theatre and Roadside Theatre Companies will participate in

seminar discussions and collaborate with students on the projects.

**[455 Topics in Aesthetics/Horror]**

Spring.

W 4:15-6:15. N. Carroll. Not offered 1990-91.

This course focuses on the genre of horror and seeks to explore its nature, its characteristic effects and structures, its imagery and its narrative forms, its social implications and the nature of the pleasures it affords audiences. The primary text for the course will be *Paradoxes of the Heart: The Philosophy of Horror* by Noel Carroll, along with selected readings by Burke, Lovecraft, King, Twitchell, Heller, and Waller. Philosophical articles on the topics of how it is possible to fear fictions and on how one can derive pleasure from what is distressing will also be examined. Plays, films, novels, and short stories will also be discussed on a weekly basis in class in terms of the ways in which they shed light on the genre as a whole.]

**494 History of Avant-Garde Theatre**

Spring. 4 credits. No prerequisite, but a basic knowledge of theatre history is expected.

W 2-4:25. S. Banes.

This course will examine the history of avant-garde theatre from its roots in Wagner's notion of the *Gesamtkunstwerk*, through the experiments of the Symbolists, Italian and Russian Futurists, Expressionists, Constructivists, Dadaists, Surrealists, and various later exponents of art-theatre in the twentieth century, up to the downtown loft, gallery, and cabaret performance art of the 1980s. Students may elect to research and reconstruct a historical performance as a final project. Some outside film screenings will be required.

**633 Seminar in Theatre History**

Fall. 4 credits.

W 12:20-2:15. M. Hays.

Advanced work in a specific area of theatre history.

**[636 Seminar in Dramatic Criticism]**

Fall. 4 credits. Prerequisite: Permission of instructor.

T 2:30-4. M. Hays. Not offered 1990-91.

Critical approaches to the drama.]

**637 Seminar in Dramatic Theory**

Spring. 4 credits. Prerequisite: Permission of instructor.

W 2:30-4. M. Hays.

Recent developments in dramatic theory.

**[648 East and West German Drama: Post 1945 (also German Studies 438)]**

Fall. 3 credits. Not offered 1990-91.

W 1:25-3:25. D. Bathrick.

This course will cover the major historical and textual developments in German theatre from the end of World War II to the present. Leading dramatists from West and East Germany, Switzerland, and Austria (Brecht, Frisch, Durrenmatt, Weiss, Hochhuth, Müller, Braun, Kroetz, Handke, and others) will be treated in the light of the political events and aesthetic-dramaturgical traditions from which they emerge and with which they are taking issue.]

**[655 Advanced Topics in Aesthetics/Comic Theory]**

Fall. 4 credits.

W 4:15-6:15. N. Carroll. Not offered 1990-91.

This seminar will examine traditional and contemporary theories of laughter and humor, including writings by Plato, Aristotle, Cicero, Hazlitt, Spencer, Freud, Bergson, Roger Scruton, Stanley Cavell, Ronald deSousa, Ted Cohen, and John Morreall, among others. The course will attempt to isolate the nature and structure of jokes, puns, riddles, farces, parodies, satires, caricatures, sight gags, cartoons, and a gamut of comic forms, including stand-up monologues and informal badinage. Selected films, plays, club recordings, novels, short stories, cartoons, and videos will be studied to ground our theorizing empirically. The ethical, social, and political ramifications of humor will also be a concern of the course.]

**[656 Race and Theatre in America (also English 656)]**

Spring. 4 credits.

T 3:30-5:30. B. Jeyifo. Not offered 1990-91.

The course will explore the representation(s) of race in selected periods and movements of dramatic writing and theatrical performance in America. Drawing both on conventional dramatic theories of "types" and "masks" and poststructuralist theories of "otherness" and "difference," the course will study important dramatic texts and performance forms which have made race such a historically crucial dimension of the American theatre. One major area of our exploration will be the changing patterns of the politics of representations of race in the American theatre. Class discussion will draw on supplementary materials such as films, video, and slides.]

**[678 Theory and Practice of Modern Drama]**

Spring. 4 credits.

W 3:35. D. Bathrick. Not offered 1990-91.

The course will explore different theories of modern drama (Szondi, Brecht, Artaud, etc.) and discuss these on the basis of a number of representative works of modern drama. The point will be to trace the interchange between theory formation and dramatic practice.]

**[679 Bertolt Brecht in Context (also German Studies 679 and Comparative Literature 679)]**

Spring. 4 credits. Requirements: seminar paper that will form the basis for an oral presentation for class discussion.

D. Bathrick. Not offered 1990-91.

Brecht's theory and dramatic praxis will be examined in the light of a two-fold contexts: (1) the relation of selected plays and writings to the historical contingencies of the Weimar and exile periods in which they emerged; (2) in later periods: an analysis of the reception and various readings of these same works by later writers and critical publics in West Germany, East Germany, and the United States as a way of understanding the changing nature of aesthetic values in the postwar period. Special attention will be given to the importance of Marxism for Brecht's art, as well as to the author's role as a representative of the cultural avant-garde.]

**[698 Performing the Sixties]**

Fall. 4 credits.

T 4:15-6:15. S. Banes. Not offered 1990-91.

During the 1960s, the roots of postmodernism in the arts were planted as artists and critics posed fundamental questions about the relationship between "high" and "low" culture; about the interdisciplinarity of art forms; and about the relationship between art and community. Performance itself became the key site of artistic investigation for artists in various media. This seminar will examine performance practice in the 1960s, focusing on the avant-garde in the early part of the decade as a harbinger of the cultural explosion later in the decade. We will look at Happenings and Fluxus, as new genres of performance generated by the cultural milieu of this era; at the beginnings of postmodern dance and the Off-Off Broadway movement; at underground film; at new genres, later in the decade, of the spectacle of anti-war protest and guerrilla theatre; and at the broader context of popular culture and its appropriations by the avant-garde. An in-class presentation of an original research project will be required, as will some outside film screenings (times to be arranged.)

**Acting****155 Rehearsal and Performance**

Fall or spring. 1-2 credits. 1 credit per production experience per term up to 2 credits per term. Students must register for the course in the term in which credit is earned; requests for retroactive credit will not be honored. Limited to students who are assigned roles after tryouts at the department's scheduled auditions or who are assigned assistant director positions after obtaining director's approval. Students should add this course only after they have been assigned roles. S-U grades only.

Staff.

The study, development, and performance of roles in departmental theatre or dance productions or the study and practice of directing as experienced in assisting faculty and guest directors.

**280 Introduction to Acting**

Fall or spring. 3 credits. Each section is limited to 16 students. Registration only through department roster in the registrar's office, Center for Theatre Arts.

01 T R 2:30-4:25 (primarily for prospective majors and those interested in extended study of acting), A. Van Dyke.  
02 T R 12:20-2:15, staff. 03 M W 12:20-2:15, K. Grant. 04 M W 2:30-4:25, staff. 05 T R 2:30-4:25, staff. 06 M W 10:10-12:05, staff. 07 M W 2:30-4:25, staff.

An introduction to an actor's technique and performance skills, exploring the elements necessary to begin training as an actor, i.e., observation, concentration, and imagination. Focus will be on physical and vocal exercises, improvisation, and text and character. There is required play reading, play attendance, and some scene study.

**281 Acting I**

Fall or spring. 3 credits. Each section limited to 14 students. Prerequisites: Theatre Arts 280 and audition. Registration only through department roster in registrar's office, the Center for Theatre Arts.

01 T R 10:10-12:05, A. Van Dyke.

02 T R 12:20-2:15, K. Grant.

Practical exploration of the actor's craft through improvisation and exercises in physical and psychological action. Scene study utilizing the plays of Williams, Inge, and Miller.

**[282 Introduction to Voice and Speech for Performance]**

Fall or spring. 2 credits.

Staff. Not offered 1990-91.

Study and practice in the development of the speaking voice with emphasis on tone quality, breathing, articulation, and practice of standard American English pronunciation. Some oral interpretation of poetic, narrative, and dramatic text.]

**[283 Voice and Speech for Performance]**

Spring. 2 credits. Limited to 12 students.

Primarily for department majors. Prerequisites: TA 282. Not offered 1990-91.

Registration only through department roster in the main office of the Center for Theatre Arts. Development of the speaking voice with additional emphasis on dramatic interpretation.]

**[284 Speech and Dialects for Performance]**

Fall. 3 credits. Limited to 12 students. Not offered 1990-91. Primarily for department majors or advance undergraduate training program candidates. Prerequisites: TA 280, 281.

Registration only through department roster in the main office of the Center for Theatre Arts. Development of speech and dialects in dramatic text.]

**287 Summer Acting Workshop**

Summer. 3 credits. Limited to 16 students in a section. Fee for theatre admissions, \$10.

An introduction to the processes of acting. Practice in training techniques, rehearsal procedures, and methodology. Productions of the Hangar Theatre company attended and used as performance examples. Includes visits by guest artists and Hangar Theatre company members.

**380 Acting II**

Fall. 3 credits. Prerequisite: TA 281 and audition.

T R 10:10-12:05. R. Wilson.

A continuation of Acting I. Special consideration will be given to verse and drama and plays in transition.

**381 Acting III: Advanced Scene Study**

Spring. 3 credits. Prerequisite: TA 280, 281, 380, and permission of instructor.

R. Wilson.

This course focuses on advanced problems in language and period style (carriage, bows, and curtsies). Monologues and scenes will be drawn from these playwrights: Shakespeare, Moliere, Shaw/Coward, Sheridan/Goldsmith/Wycherly, and Aeschylus/Euripedes.



**385 Skills, Techniques, and Approaches to Performance**

Spring. 2 credits. Prerequisites: Theatre Arts 281 and permission of instructor.

Hours to be announced. K. Grant.

This course will focus on exercises and techniques designed to aid the students in developing the range of their physical skills in order to deepen their understanding of their bodies and its value to their work in rehearsal and performance. The students will be encouraged to explore basic principles of movement and gain an appreciation for how their physical choices can be used to create more complete characterizations. The curriculum will include: tension/relaxation, breath, alignment and flexibility work in conjunction with exercises using neutral and expressive mask techniques.

**Directing****155 Rehearsal and Performance**

Fall or spring. 1–2 credits. 1 credit per production experience per term up to 2 credits per term. Students must register for the course in the term in which credit is earned; requests for retroactive credit will not be honored. Limited to students who are assigned roles after tryouts at the department's scheduled auditions or who are assigned assistant director positions after obtaining director's approval. Students should add this course only after they have been assigned roles. S-U grades only. Staff.

The study, development, and performance of roles in departmental theatre or dance productions or the study and practice of directing as experienced in assisting faculty and guest directors.

**398 Fundamentals of Directing I**

Fall. 3 credits. Limited to 12 students. Prerequisite: Theatre Arts 280 and permission of instructor.

M W 12:20–2:15. D. Feldshuh.

Focused, practical exercises to teach the student the fundamental staging techniques that bring a written text to theatrical life. A core objective of the course is to increase the student's awareness of why and how certain stage events communicate effectively to an audience. Each student will direct a number of exercises as well as a short scene.

**498 Fundamentals of Directing II**

Spring. 4 credits. Enrollment strictly limited. Prerequisite: Theatre Arts 280 and 398, and permission of instructor.

M W 12:20–2:15 plus lab time to be arranged. D. Feldshuh.

The course builds on the staging techniques learned in Fundamentals of Directing I. In this course each student will direct a series of projects and public presentations focusing on specific directorial challenges. The student will develop an increased ability to articulate and defend directorial choices and learn to work with actors on a diverse range of material. The course is open to graduate and undergraduate students. Directors will cast from a company of actors to be auditioned early in the semester. Each actor in the company will earn one or two credits as part of Theatre Arts 155.

**499 Seminar in Directing**

Fall or spring. 1–4 credits. Prerequisites: Theatre Arts 240, 250, 280, 398, 498, and permission of instructor.

Hours to be arranged. D. Feldshuh.

This seminar will give the student the opportunity to direct a full evening of theatre. It may also involve an internship with a prominent director on campus and a final paper focusing on a specific aspect of directing.

**Playwriting****348 Playwriting**

Fall. 4 credits. Prerequisite: permission of instructor.

T R 2:55–4:10. J. O'Neal and B. Levitt.

A laboratory for the discussion of student plays. Following exercises in dramatic structure and technique, students will be expected to write two or three one-act plays.

**349 Advanced Playwriting**

Spring. 4 credits. Prerequisite: Theatre Arts 348.

T R 2:30–3:45. R. Wilson.

A continuation of Theatre Arts 348, culminating in the composition of a full-length play.

**497 Seminar in Playwriting**

Fall. 1–4 credits. Prerequisite: Theatre Arts 348 and 349 or permission of instructor.

To be announced. W. Soyinka and B. Levitt.

This seminar will provide the student with the opportunity to collaborate with faculty directors, designers, and actors in the production of his/her own work. The course will include a final paper and faculty critique of the manuscript and the production process.

**Design, Technology and Stage Management****Design****120 The Unfashionable Human Body**

Fall. 3 credits.

T R 2:55–4:10. J. Johnson.

At an early age we learn the magic power of dress. There are many theories about why we wear clothes: protection from the elements, love of ornamentation, sexual attraction, and modesty, to name a few. Whatever the reason(s), our dissatisfaction with the human body expresses itself in all cultures, and that expression is endlessly changing.

Students will explore the various theories, look at examples from decoration to distortion (i.e., masks, corsets, tattoos, and fads) and write about how society addresses (or undresses) "the unfashionable human body."

**250 Fundamentals of Theatre Design and Technology**

Fall and spring. 4 credits. Not open to first term freshman. Limited to 12 students. A minimum of one credit of Production Lab (TA 151 or 251) is strongly recommended concurrently.

M W F 12:20–2:15. R. Archer, J. Johnson, J. Moon, P. Gill, D. Hall. C. Orr.

An introduction to design and technology in the theatre. Lectures, discussion, and project work introduce the visual principles of designing scenery, costumes, lighting and sound, and the technical process of realizing designs on stage. Students are required to purchase materials, which the instructors will specify (approximate cost, \$35).

**362 Lighting Design Studio I**

Fall. 4 credits. Students are required to purchase materials which the instructor will specify (approximate cost \$25.00). Prerequisite: TA 252 and 340 or permission of instructor.

T R 12:20–2:15. P. Gill.

An examination of the fundamental theories of color and the physical characteristics of light. Through discussion and a series of projects in the light lab this course examines the role of light as a flexible, expressive art medium; its visual nature and dramatic impact, and the intuitive nature of the successful approach to lighting the dramatic text.

**364 Scenic Design Studio**

Fall and spring. 4 credits. Students are required to purchase materials which the instructor will specify (approximate cost: \$50.00). Prerequisite: TA 340 and 354 or permission of instructor.

M W 10:10–12:05. J. Moon.

An exploration of the process of designing scenery for the stage: analysis of the dramatic text, use of research and imagery, theatre architecture, communication techniques, and materials for building the scenic model. Four required design projects will use the major stage forms and involve the design and construction of full color scale models. Each project will represent a formative period in the history of dramatic literature and theatre architecture. May be repeated for credit.

**366 Costume Design Studio**

Spring. 4 credits. Students are required to purchase materials which the instructor will specify (approximate cost: \$50.00). Prerequisite: TA 356 or permission of instructor.

T R 10:10–12:05. J. Johnson.

Design of costumes for the theatre, concentrating on script and character analysis, period research, design elements, figure drawing and rendering skills, and understanding production style. May be repeated for credit.

**368 Sound Design Studio**

Spring. 4 credits. Limited enrollment to 6 students. Prerequisite: TA 252 and TA 250 or permission of instructor. Students are required to purchase supplies (approximate cost \$30.00).

T R 10:10–12:05. C. Hatcher.

The use of sound as a medium of design for the theatre; research and creation of sound score, recording and engineering techniques, live effects and projects in live and studio sound production.

**462 Lighting Design Studio II**

Spring. 4 credits. Prerequisite: TA 362 or permission of instructor. Limited to 6 students.

T R 12:20–2:15. P. Gill.

A concentration on the individual development of the lighting designer. Advanced projects and research tailored to each student, combined with design competition entries in many fields and an in-depth study of the aesthetics of lighting in all areas of environmental design.

**Technology****252 Technical Production Studio I**

Fall. 2 credits. A minimum of one credit of production laboratory (TA 151 or 251) is required concurrently.

TR 10:10–12:05. C. Hatcher, M. Figursky.  
Stage Lighting Technology: The practical aspects of lighting technology: stage electrics, equipment, organization, techniques, and paperwork will be explored through projects, lecture, and class discussion. Stage Sound Technology: The practical aspects of sound technology: equipment set-up, organization, recording techniques and paperwork will be explored through projects, lecture, and class discussion.

**[254 Theatrical Make-up Studio]**

Spring. 3 credits. Students are required to purchase make-up kits which the instructor will provide (approximate cost \$30.00). Prerequisite: permission of instructor. Not offered 1990–91.

TR 2:30–4:25. J. Johnson.  
Basic techniques of make-up for the stage including corrective, old age, and fantasy; use of prosthetics, wigs, hair and hairpieces.]

**256 Technical Production Studio II**

Spring. 2 credits. A minimum of one credit of production laboratory (TA 151 or 251) is required concurrently. Limited to 6 students. Students are required to purchase materials which the instructor will specify (approximate cost \$25.00). Prerequisite: TA 250 or permission of instructor.

TR 10:10–12:05. J. Gallager, G. Bakke.  
Scene Painting: Techniques of paint and set decoration for the stage including large format layout, grid systems, transfer methods, color mixing and matching, dye painting, airbrush and spray systems are a traditional approach to scenic art. Stage Properties: The design and construction of scenic, hand and costume props, concentrating on period research and accuracy of detail, use of various materials, crafts and construction techniques, and painting and finishing.

**340 Theatrical Drafting and Technical Drawing Studio**

Fall. 3 credits. Limited to 6 students. Prerequisite: Theatre Arts 250 or permission of instructor.

MWF 9:05–9:55. S. Brookhouse.  
Implementation of the fundamentals of drafting and technical drawing. Introduction of the concept of an individual style in the approach to drafting for the theatre. A series of projects to familiarize students with the convention and process of visualization and drafting.

**354 Stagecraft Studio**

Spring. 3 credits. A minimum of one credit of production laboratory (TA 151 or 251) is strongly recommended concurrently. Prerequisite: TA 250 or permission of instructor.

MW 10:10–12:05. R. Archer.  
An exploration of the techniques and practice of theatre operation, scenic construction, stage mechanics, rigging, painting, and model building.

**356 Costume Construction Studio**

Fall and spring. 3 credits. A minimum of one credit of production laboratory (TA 151 or 251) is strongly recommended concurrently. Prerequisite: TA 250 or permission of instructor.

MW 2:30–4:25. C. Orr.

A project/lecture/discussion class in costume research, patterning, cutting, construction, and fitting.

**Stage Management****153 Stage Management Production Laboratory I**

Fall and spring. 1–3 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium theatre at the Center for Theatre Arts at 7:30 p.m. on the first Tuesday of classes.

P. Guion.

Practical production experience in theatrical production as an assistant stage manager for a smaller scale production under the supervision of the faculty production stage manager. Theatre Arts 370 complements this course.

**253 Stage Management Laboratory II**

Fall and spring. 1–3 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium theatre at the Center for Theatre Arts at 7:30 p.m. on the first Tuesday of classes.

P. Guion.

Practical experience in theatrical production as assistant stage manager for a large scale production under the supervision of the faculty production stage manager. TA 370 complements this course.

**353 Stage Management Laboratory III**

Fall and spring. 1–3 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium theatre at the Center for Theatre Arts at 7:30 p.m. on the first Tuesday of classes. Prerequisite: permission of the instructor.

P. Guion.

Practical experience in theatrical production as stage manager for a small scale production under the supervision of the faculty production stage manager. TA 370 complements this course.

**370 Stage Management Studio**

Fall and spring. 1 credit. Prerequisite: TA 250 or 280. T 2:30–4:25

P. Guion.

Introduction to the concepts and techniques of stage management as they relate to specific areas of production. Development of relevant communication skills and an understanding of the production process as experienced by a working stage manager or assistant stage manager. TA 153, 253, and 353 complement this course.

**453 Stage Management Laboratory IV**

Fall and spring. 1–3 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium theatre at the Center for Theatre Arts at 7:30 p.m. on the first Tuesday of classes. Prerequisite: permission of instructor.

P. Guion.

Practical experience in theatrical production as stage manager for a large-scale production under the supervision of the faculty production stage manager.

**Production Laboratories****151 Production Laboratory I**

Fall and spring. 1–3 credits. May be repeated for credit. Orientation meeting on the first Tuesday of classes each semester at 7:30 p.m. in the proscenium theatre.

S. Brookhouse, M. Figursky, J. Gallager, D. Hall, C. Hatcher, C. Orr.

Practical experience in theatrical production. Students register for sections by areas of interest. 01 Scenery, 02 Costumes, 03 Properties, 04 Lighting, 05 Sound, 06 Stage Crew. No prerequisites or experience required.

**251 Production Laboratory II**

Fall and spring. 1–3 credits.

S. Brookhouse, M. Figursky, J. Gallager, D. Hall, C. Hatcher, C. Miltenberger, C. Orr.

Practical experience in theatrical production, in a position of major responsibilities on the production staff. Prerequisite: TA 151 or permission of instructor. May be repeated for credit. Orientation meeting on the first Tuesday of classes each semester at 7:30 p.m. in the Proscenium theatre. Students register for sections by areas of interest: 01 Scenery, 02 Costumes, 03 Properties, 04 Lighting, 05 Sound.

**351 Production Laboratory III**

Fall and spring. 1–3 credits. May be repeated for credit. Orientation meeting on the first Tuesday of classes each semester at 7:30 p.m. in the Proscenium theatre. Students register for sections by areas of interest: 01 Scenery, 02 Costumes, 03 Properties, 04 Lighting, 05 Sound. Prerequisite: Permission of instructor.

R. Archer, C. Hatcher, P. Gill, J. Moon, C. Orr.

Practical experience in theatrical production, in a position of major responsibility on the production staff or as assistant to a faculty or guest designer.

**451 Production Laboratory IV**

Fall and spring. 1–4 credits. May be repeated for credit. Orientation meeting on the first Tuesday of classes each semester at 7:30 p.m. in the Proscenium theatre. Students register for sections by areas of interest: 01 Scenery, 02 Costumes, 03 Properties, 04 Lighting, 05 Sound. Prerequisite: permission of instructor.

P. Gill, C. Hatcher, J. Johnson, J. Moon.

Practical experience in theatrical production, in the position of designer or in another position of major responsibility on the production staff.

**Internships****485 Undergraduate Internship**

Summer. 1–6 credits. Prerequisite: permission of AUP faculty.

Program of supervised experience with a noted professional company or individual either in the United States or abroad chosen in consultation with the faculty advisor.

**FILM****274 Introduction to Film Analysis: Meaning and Value**

Fall or occasionally summer. 4 credits. Limited to thirty-five students.

TR 10:10–12:05. D. Fredericksen.

An intensive consideration of the ways films generate meaning and of the ways we attribute meaning and value to films. Discussion ranges over commercial narrative, documentary, and personal film modes. Prospective film majors should enroll in their sophomore year.

**313 The Japanese Film (also Asian Studies 313)**

Spring. 4 credits.

Screenings, M W 4:30; lec, W 11:15; sec F 11:15, 12:20, or 1:25. J. M. Swanberg.

After an introduction to methods of film analysis, the course presents a sequence of ten films by noted Japanese directors. The aim of the course is twofold: to enhance appreciation of film as an art form and to use the formal analysis of films to yield insights into Japanese society and culture. Particular attention is given to areas in which Japanese film, influenced by traditional arts and aesthetic principles, has resisted Hollywood editing codes.

**375 History and Theory of the Commercial Narrative Film**

Fall. 4 credits. Fee for screening expenses, \$10 (paid in class).

T R 1:25-4:25. D. Fredericksen.

Consideration of the broad patterns of narration in the history of the commercial narrative film, viewed as an artistic medium and as a system requiring the massive consumption of artifacts. Emphasis placed upon the early articulation of a cinematic means of narration, realism as an artistic style, the nature and functions of popular film, and the modes of modernist and post-modernist narration. Major figures discussed include Griffith, Eisenstein, Murnau, Von Stroheim, Dreyer, Chaplin, Renoir, Ford, Hitchcock, Welles, Antonioni, Fellini, Bergman, Bunuel, Resnais, Godard, and Herzog. Students majoring in film should have taken Theatre Arts 274 previously.

**[376 History and Theory of Documentary and Experimental Film.**

Fall. 4 credits. Fee for screening expenses, \$10 (paid in class). Prerequisite: Theatre Arts 274 is strongly recommended, but not required. Not offered 1990-91. Next offered 1991-1992.

T R 1:25-4:25. D. Fredericksen.

The history and theory of documentary form up to the end of World War II. Major figures covered include Vertov, Flaherty, Ivens, Grierson, Lorentz, Riefenstahl, Capra, Hurwitz, and Jennings. Within the history and theory of the experimental and personal film form, emphases are: the avant-garde of the twenties in Germany, France, U.S.S.R., and the U.S., the movement toward documentary practice in the thirties, and American experimental and personal film from the forties to the present. Major figures covered in this latter period include Deren, Brakhage, Baillie, Belson, the Whitneys, Hill, and Mekas.]

**377 Fundamentals of 16mm Filmmaking**

Fall and spring. 4 credits. Limited to 12 students. Intended for juniors and seniors (who may need to sign up a year or more in advance). Prerequisite: Theatre Arts 274 and permission of instructor. Fee for maintenance costs, \$50 (paid in class). The average cost to each student for materials and processing is \$300.

M W F 2-4:25. M. Rivchin.

A hands-on course in the basics of 16mm filmmaking techniques, requiring no prior experience. Each student will complete a number of short film projects to explore narrative, experimental, documentary, animation, and abstract genres. A longer, final sound film project will be screened publicly.

**[378 Russian Film of the 1920s and French Film of the 1960s**

Spring. 4 credits. Fee for screening expenses, \$10 (paid in class). Prerequisite: Theatre Arts 375 is strongly recommended, but not required. Not offered 1990-91. Next offered 1992-93.

T R 1:25-4:25. D. Fredericksen.

An intensive treatment of two distinct periods of innovation in film theory and history. Emphasis on working relationship between theory and practice. Major figures include Eisenstein, Pudovkin, Vertov, Dovzhenko, Room, Godard, Truffaut, Resnais, Eustache, Rivette, and Bresson.]

**[379 International Documentary Film from 1945 to present**

Spring. 4 credits. Prerequisite: Theatre Arts 376. Fee for screening expenses, \$10 (this fee is paid in class). Not offered 1990-91. Next offered 1991-92.

T R 1:25-4:25. D. Fredericksen.

Emphasis on the contemporary documentary film as a sociopolitical force, as an ethnographic tool within and without a filmmaker's own culture, and as an artistic form with a distinct history and set of theatrical questions. Major figures, structures, and movements covered include Jennings, Rouquier, Leacock, Maile, Rouch, Solanas, national film boards, Challenge for Change, direct cinema, cinema verite, and revolutionary documentary of the Third World.]

**[396 German Film (also Comparative Literature 396 and German Studies 396)**

Fall. 4 credits. Requirements: participation in class discussion, one paper, midterm, and final. Not offered 1990-91.

T R 11:40-12:55; screenings, T 4:30.

D. Bathrick.

The goal of the course is to explore the form and context of German film in relation to the cultural and sociopolitical context of which it is a part. Accordingly, the material discussed will be divided into three major periods: Weimar film, 1918-1933; Nazi film, 1933-45; postwar film, 1945-present. Readings and lectures will be devoted to formal and cultural developments in the history of German film as well as interpretive analysis of selected individual films. In both lectures and discussions, particular emphasis will be placed on helping students develop an appropriate method of viewing and analyzing films.]

**[413 Film and Performance**

Fall. 4 credits. Prerequisite: permission of both instructors. Previous work in at least one appropriate medium. Not offered 1990-91.

T R 2:30-4:25. M. Rivchin and staff.

This course is designed to encourage interdisciplinary connections among the students of the theatre, dance, and film programs in the Department. The course will focus on one program (dance, acting, or directing) and how it relates to film and video media. Students will work collaboratively to produce new work in both performance and recorded modes.]

**[414 Contemporary Film Theory (also Society for the Humanities 411, English 410, and Women's Studies 431).**

Fall. 3 credits.

T 11:10-1:05. C. Penley.

This course will survey the major figures and ideas that have shaped contemporary film theory: Christian Metz's semiotics of the cinema, Raymond Bellour and Thierry Kuntzel's textual analyses of film, Jean-Louis Baudry's "Apparatus" theories. Stephen Heath's work on narrative and ideology and Laura Mulvey's feminist and psychoanalytic approach to describing spectatorship. In addition, the course will cover the most important revisions and refutations of those theories by feminists, Marxists, neo-formalists, deconstructionists, cognitive theorists, cultural studies and popular culture scholars, and so on. Attention will also be given to the social and institutional forces that have shaped this relatively new and volatile discipline.

**416 Cinema and the Humanism of Commodity (also Society for the Humanities 416 and Women's Studies 436).**

Spring. 3 credits.

T 12:20-2:15. T. Minh-ha.

Media production plays a primary role in maintaining a system of depoliticized multicultural diversity, which keeps each marginal group in a definable place as the latter is urged to provide the expected "difference." The seminar will emphasize issues of race and gender in representation, focusing on works that challenge conventional notions of subjectivity, of audience, and of interpretation in relation to film making, film viewing, and the cinematic apparatus. It will discuss the effect of social multiplication of images through which the whole world, in the name of humanism, is gathered within the fold of the known and the visible, and becomes appropriate.

**[450 Seminar on Ethnographic Film (also Anthropology 450)**

Spring. 4 credits. Limited by appropriate screening space. Not offered 1990-91.

T 10:10-12:35. R. Ascher.

When the first ethnographic film was screened in 1895, its maker saw in motion pictures a promise for the greater understanding among peoples. Has the promise been fulfilled? Responses to this question are examined through study of the debates about the place of film within what Margaret Mead called "a discipline of words." Going further, we enlarge the frame and consider ethnographic film in the light of general film theory, history, criticism, aesthetics, and ethics. Selected, relatively short films are viewed, leaving ample time for discussion and the development of a critical vocabulary.]

**474 Advanced Film Projects**

Summer. 4 credits. Limited to 12 students. Prerequisite: TA 280, 281, or 377 or equivalent and permission of instructor. Maintenance fee, \$50.

M. Rivchin.

Students work in small crews to produce a short dramatic film and/or short documentary film, using synchronous sound filming and editing equipment. Equipment is provided, but students must pay for film and processing (average cost, \$250).

**[475 Seminar in the Cinema I (also College Scholar Seminar)]**

Spring. 4 credits. Not offered 1990–91. Next offered 1991–92.

TR 10:10–12:05. D. Fredericksen.  
Topics for 1992: Jung, film, and the process of self-knowledge. "Know thyself": this has been called our culture's most enduring psychological need, and it has been frequently offered as the *raison d'être* for liberal studies. C. G. Jung's answer to how one might "know oneself" is based on his claim that "image is psyche" and his informing metaphor is depth. The seminar will trace the elaborations of this position in Jung, James Hillman, Russell Lockhart, and Murray Stein. It will also test the critical capacities of this position with respect to film images given us by Bergman, Fellini, Brakhage, Gunvor Nelson, Suzan Pitt, Larry Jordan, Bruce Baille, and others. The manner in which Jung's claim might provide an archetypal and imaginal alternative to current approaches to liberal studies will be asked throughout the seminar; the nature of education will thereby become a central theme of the semester's work.]

**[476 Seminar in the Cinema II]**

Spring. 4 credits. Not offered 1990–91. Next offered 1992–93.

TR 9:05–12:05. D. Fredericksen.  
Topic for 1993: to be announced.]

**477 Intermediate Film Projects**

Spring. 4 credits. Limited to 8 students.  
Prerequisite: Theatre Arts 377 or equivalent, and permission of instructor. Fee for maintenance costs, \$50 (this fee is paid in class). The minimum cost to each student for materials and processing is \$500. Students retain ownership of their films.

MW 10:10–12:05. M. Rivchin.  
The development and completion of individual projects, with emphasis on personal and documentary modes. Includes preparation of an original script or storyboard, direction, cinematography, synchronous-sound recording, editing, and follow-through to a composite print.

**653 Myth onto Film (also Anthropology 653)**

Fall. 4 credits. Open to undergraduate and graduate students with permission of instructor. Enrollment limited by available studio space and equipment. Prerequisite: some knowledge of any one of the following: anthropology, filmmaking, mythology, graphics, drawing, and painting.

T 2–4:25. R. Ascher.  
In myths, whales fly, pebbles throw themselves across streams, and trees are transformed into women. Toward the end of visualizing myths—in particular the myths of other people—we explore the possibilities of animated film. The technique used is cameraless animation; that is, we draw and paint, frame by frame, directly onto motion picture film. The intellectual problem is to visualize the myths of others so that they are comprehensible to us but are not thought to be of us. Reading includes introductory works on both myth and animation, and there is background reading on the particular myth that is committed to film.

**[699 German Film Theory (also German Studies 699 and Comparative Literature 699)]**

Spring. 4 credits.

R 1:25–3:20. D. Bathrick. Not offered 1990–91. Offered occasionally.

This course will examine critically the writings of major German film theories from the Weimar period to the present. Works by Bela Balazs, Rudolf Arnheim, Siegfried Kracauer, Walter Benjamin, Theodor Adorno, Max Horkheimer, Alexander Kluge, H. J. Syberberg, Gertrud Koch, Thomas Elsaesser, and others will be read and discussed in light of the following considerations: What are the cultural and political contexts out of which these ideas emerge and how are these theories addressing these contexts? How do these theories relate to the work coming out of other national traditions at the same time or to current debates in feminist, formalist, postmodern, or poststructuralist film theory. There will be film showings.]

**DANCE****123 Ballet I (also Physical Education 423)**

Fall and spring. 0 credit.

Theatre Arts and Physical Education registration at Teagle Hall only.

Fall: M W 3:10–3:40; Spring: to be announced. P. Saul.

The fundamentals of classical ballet technique. Material covered includes all of the exercises at the barre, and elementary work in the areas of port de bras, adage and allegro. Satisfies the PE requirement.

**124 Modern Dance I (also Physical Education 424)**

Fall and spring. 0 credit. Theatre Arts and Physical Education registration at Teagle Hall only.

Fall. Sec. 01 M W 1:30–3:00. J. Chu. Sec. 02 TR 1:30–3:00. Staff. Spring times to be announced.

The fundamentals of modern dance technique. Elementary dance movement phrases, with attention to rhythm, placement, and vitality of performance. Satisfies the PE requirement.

**[150 Writing About Dance]**

Spring. 3 credits. Not offered 1990–91.

TR 10:10–11:25. S. Banes.

In this freshman writing seminar, dance is analyzed as a system of nonverbal communication. We will explore methods of categorizing and describing human behavior such as kinesics, proxemics, and choreometrics; examine the function of dance in society; and study specific dance styles. Although in class we will work from film or video recordings, attending live dance performances will be an integral part of the course.]

**155 Rehearsal and Performance**

Fall and/or spring. 1–2 credits. 1 credit per production experience per term up to 2 credits per term. Students must register for the course in the term in which credit is earned; requests for retroactive credit will not be honored. Limited to students who are assigned roles after tryouts at the department's scheduled auditions or who are assigned assistant director positions after obtaining director's approval. Students should add this course only after they have been assigned roles. S-U grades only.

Staff.

The study, development, and performance of roles in departmental theatre or dance

productions or the study and practice of directing as experienced in assisting faculty and guest directors.

**[200 Introduction to Dance]**

Spring and summer. 3 credits. Not offered 1990–91.

TR 1:25–2:40. J. Morgenroth.

Introduction to aesthetics and theoretical issues in Western theatrical dancing, with emphasis on the twentieth century. Viewing of films, live performances, and videotapes and discussion of readings. Two papers.]

**201 Dance Improvisation**

Fall. 3 credits. Limited to 12 students.

Concurrent enrollment in a dance technique class at the appropriate level is required.

Registration only through department roster in the main office of the Center for Theatre Arts.

TR 3:10–4:40. J. Morgenroth

Exploration of movement invention and group composition through structured dance improvisation. Live musical accompaniment.

**202 Contemporary Dance**

Spring. 3 credits.

TR 1:25–2:40. S. Banes.

This introductory course surveys the current scene in dance culture. The focus is on American dance (including Euro-American, African-American, Asian-American, and Hispanic dance), although some attention will be given to developments in Europe (such as Pina Bausch), Asia (such as Butoh), and Africa (such as Highlife). Through lectures, readings, class discussions, research projects, and viewings of videotapes, films, and live performances, the course will analyze theatrical dancing (from ballet to modern, postmodern, and tap) as well as social dancing (from breakdancing to voguing and lambada) in the 1980s and 1990s.

**206 Making Dances to Music**

Fall. 3 credits. Limited to 10 students.

Concurrent enrollment in a dance technique class at the appropriate level is required.

Registration only through department roster in the main office of the Center for Theatre Arts. No prerequisites.

M W F 12:20–1:10. P. Saul.

In this course music is used as the point of departure for composing movement. Materials for a personal movement vocabulary are discovered through in-class improvisation. Assigned experimental studies composed out-of-class are critiqued and then reworked. At the end of the semester selected studies are performed at an informal studio showing. Students are expected to attend campus dance performances for class discussion. Films and videotapes are viewed.

**[209 Introduction to African Dance (also AS&RC 209)]**

Fall. 3 credits. Not offered 1990–91.

TR 10:10–11:25. F. Ajayi.

An introduction to ancient African dance forms, origins, socio-economic and political significance; the state of the dances, changes and continuing relevance in contemporary times. This course will look at the evolution and significance of contemporary dance forms.]



**210 Beginning Dance Composition and Music Resources**

Spring. 3 credits. Concurrent enrollment in a dance technique class at the appropriate level is required. Registration only through the department roster in the main office of the Center for Theatre Arts.

MW 6:30–8:00. Staff.

Weekly assignments are designed to introduce students to basic elements of dance traditionally and currently used in the choreographic process. Problems are defined and explored through class improvisation as a way to encourage fresh, individual solutions. Students compose and present a series of short studies that are discussed and reworked before being performed at informal studio showings. One additional hour per week will be arranged for music-related activities. The music resource faculty will introduce the class to contemporary music for modern dance and orient the class regarding problems and possibilities with sound collaborations. Students are required to attend campus dance activities for class discussion.

**231 Ballet II (also Physical Education 431)**

Fall and spring. 0 credit. Theatre Arts and Physical Education registration at Teagle Hall only. Prerequisite: Theatre Arts 123 (Ballet I) or permission of instructor.

Fall: TR 3:10–4:40. Spring: to be announced. P. Saul.

A continuation of Ballet I for students with at least a year of dance training. In addition to more advanced forms of port de bras, adage and allegro, work is done on the pirouette. Satisfies the PE requirement.

**232 Modern Dance II (also Physical Education 432)**

Fall and spring. 0 credit. Theatre Arts and Physical Education registration at Teagle Hall only. Prerequisite: Modern Dance I or permission of instructor.

Fall: TR 1:30–3:00. J. Chu. Spring: to be announced.

A continuation of Modern Dance I, for students with at least a year of dance training. Practice of longer dance phrases, with attention to clarity of design, rhythm, and expression. Satisfies the physical education requirement.

**233 Explorations in Movement and Performance A**

Fall 1990. 0 credit. Limited to 20 students. TR 4:50–6:20. J. Self.

This course delves into the possibilities of movement and performance, utilizing unconventional techniques such as animal movements, follow the leader games, improvisation and visualization. The course is physically demanding and requires an eagerness to investigate the nature of performance and explore unfamiliar territory in movement.

**[272 Music and the Dance (also Music 272)]**

Spring. 3 or 4 credits. Prerequisite: permission of instructor. Not offered 1990–91.

TR 11:15–12:30. R. Harris-Warrick.

This course will explore selected topics in the interrelations between music and dance in the Western tradition. Some of the areas to be examined include the influence of dance movement on musical composition, composer-choreographer relationships, and a comparison of music composed for dancing with dance music composed for listening. Examples will

be drawn from the Renaissance, the baroque period, and a modern era. Students will be asked to pursue an independent project.]

**304 Ballet III (also Physical Education 434)**

Fall and spring. 0 or 1 credit. May be repeated for up to 4 credits. Prerequisite: Ballet II or permission of instructor.

Fall: MWF 4:50–6:20. Spring: to be announced. P. Saul.

Study and practice of traditional training exercises and the classical ballet vocabulary; work is done on strengthening the body and using it as an expressive instrument.

**305 Explorations in Movement and Performance B**

Fall 1990. 0–1 V credit. Qualification based on dance experience. Limited to 15 students.

MW 6:30–8:00. J. Self.

This course delves into the possibilities of movement and performance, utilizing unconventional techniques such as animal movements, follow the leader games, improvisation and visualization. The course is physically demanding and requires an eagerness to investigate the nature of performance and explore unfamiliar territory in movement.

**306 Modern Dance III (also Physical Education 436)**

Fall and spring. 0 or 1 credit. May be repeated for up to 4 credits. Prerequisite: Modern Dance II or permission of instructor.

Fall: MWF 4:50–6:20. J. Morgenroth. Spring: to be announced.

Advanced work with rhythm, placement, and phrasing for students who are prepared to refine technical skills of dancing. Students will be physically and mentally challenged by lengthy, complex phrases and will be expected to bring the instructor's material to life.

**[307 Asian Dance and Dance Drama (also Asian Studies 307)]**

Fall. 3 credits. May be repeated for credit. Section 1: Indian Dance, Section 2: Japanese Noh Theatre, Section 3: Indonesian Dance Theatre. Not offered 1990–91.

Hours to be arranged. Staff.

Readings, lectures, and practice sessions. On Fridays there will be lectures, demonstrations, and discussions. Videotapes and films will be shown. The Monday and Wednesday classes will consist of learning basic movement vocabulary and dances. No previous experience in dance is necessary.]

**308 Modern Dance IV (also Physical Education 438)**

Fall and spring. 0 or 1 credit. May be repeated for up to 4 credits. Prerequisite: Modern Dance III or permission of instructor.

TRF 4:50–6:20. J. Chu.

A continuation of, and supplement to, Theatre Arts 306/Physical Education 436.

**[309 African Dance Aesthetics (also AS&RC 309)]**

Spring. 3 credits. Prerequisite: TA and AS&RC209 or permission of instructor. Not offered 1990–91.

TR 10:10–11:25. F. Ajayi.

An examination of African dance styles and forms within the cultural perspective of African peoples. Practical classes will consist of learning basic movement vocabulary, techniques, and dances, with lectures on the cultural world view of the people. Practical sessions will explore the dynamics of African

dances as nonverbal artistic forms communicating a world view, with an end of semester studio showing. The course will concentrate particularly on West and East Africa.]

**310 Intermediate Projects in Dance Composition I**

Fall and Spring. 3 credits. Prerequisite: Theatre Arts 210.

Hours to be arranged. Staff.

Biweekly meetings for students working on intermediate choreographic projects to be presented in various performance situations. Work in progress will be critiqued by faculty and peers. Design problems in costuming and lighting will be approached, and students with particular interests in collaboration will have a forum in which to develop their ideas.

**311 Intermediate Projects in Dance Composition II**

Fall and spring. 3 credits. Prerequisite: Theatre Arts 310.

Hours to be arranged. Staff.

A continuation of Theatre Arts 310.

**312 Physical Analysis of Movement**

Spring. 3 credits.

TR 1:25–2:40. J. Morgenroth.

This course is an examination of human movement with particular attention to dance movement. Readings in Sweigard's *Human Movement Potential*. Guest lectures by experts in anatomy and health areas. Practical and laboratory work. Demonstration of dissection.

**[314 Western Dance History I]**

Fall. 4 credits. Not offered 1990–91.

TR 11:15–12:30. S. Banes.

A survey of the history of dance from the Renaissance to the end of the nineteenth century with emphasis on the development of theatrical forms in Western culture. No prerequisites.]

**[315 Western Dance History II]**

Spring. 4 credits. Not offered 1990–91.

TR 11:15–12:30. S. Banes.

A survey of the history of Western theatrical dance in the twentieth century. No prerequisites.]

**[318 Historical Dances]**

Spring. 2 credits. Prerequisite: Ballet II or Modern Dance II. Not offered 1990–91.

Staff.

A sampling of the social dances from the Renaissance to the present, with emphasis on pinpointing basic differences in movement styles and customs in the various periods. A major part of class time will be spent learning and performing the dances.]

**410 Advanced Dance Composition I**

Fall and spring. 3 credits. Prerequisite: Theatre Arts 310 and 311.

Hours to be arranged. Staff.

Students work on advanced choreographic problems, to be presented in performance. Work in progress will be critiqued by faculty biweekly.

**411 Advanced Dance Composition II**

Fall and spring.

Hours to be arranged. Staff.

A continuation of Theatre Arts 410.

**[418 Seminar in History of Dance]**

Spring. 4 credits. Prerequisite: Theatre Arts 315 or permission of instructor. Not offered 1990-91.

R 2:30-4:25. S. Banes.

**490 Senior Paper in Dance**

Spring. 4 credits. Prerequisite: Theatre Arts 418, senior standing.

Under faculty direction, the student will write a senior paper in dance history, criticism, or theory.

### Tracks toward selection into the advanced undergraduate training program

**Design, Technology, and Stage Management**

Required for ALL individuals interested in a Design, Technology, or Stage Management track:

**TA 151** and **TA 251** Production Lab I and II (at least 2 combined credits)

**TA 250** Fundamentals of Design and Technology

Required for Scenic Design emphasis:

**TA 340** Theatrical Drafting and Technical Drawing Studio

**TA 351** Production Lab III (at least 1 credit)

**TA 354** Stagecraft Studio

**TA 364** Scene Design Studio

Required for Costume Design emphasis:

**TA 351** Production Lab III (at least 1 credit)

**TA 356** Costume Construction Studio

**TA 358** Theatrical Make-up Studio

**TA 366** Costume Design Studio I & II

Required for Lighting Design emphasis:

**TA 252** Technical Production Studio I

**TA 340** Theatrical Drafting and Technical Drawing Studio

**TA 351** Production Lab III (at least 1 credit)

**TA 362** Lighting Design Studio I

Required for Sound Design emphasis:

**TA 252** Technical Production Studio I

**TA 351** Production Lab III (at least 1 credit)

**TA 354** Stagecraft Studio

**TA 368** Sound Design Studio

Required for Technical Direction emphasis:

**TA 252** Technical Production Studio I

**TA 340** Theatrical Drafting and Technical Drawing Studio

**TA 351** Production Lab III (at least 1 credit)

**TA 354** Stagecraft Studio

Required for Stage Management emphasis:

**TA 253** and **TA 353** Stage Management Lab II and III

**TA 280** Introduction to Acting

**TA 370** Stage Management Studio

**TA 398** Fundamentals of Directing I

**Acting**

Required for ALL individuals interested in an acting track:

**TA 151** and **TA 251** Production Lab I and II (at least 2 combined credits)

**TA 240/TA 241** Introduction to Western Theatre (1 Semester ONLY)

**TA 250** Fundamentals of Design and Technology

**TA 280** Introduction to Acting

Required for Acting emphasis:

**TA 281** Acting I

**TA 282** Introduction to Voice and Speech for Performance

or

**TA 284** Speech and Dialects for Performance

**TA 380** Acting II

Be accepted into TA 381 Acting III

**Directing**

Required for ALL individuals interested in a directing track:

**TA 151** and **TA 251** Production Lab I and II (at least 2 combined credits)

**TA 240/TA 241** Introduction to Western Theatre (1 Semester ONLY)

**TA 250** Fundamentals of Design and Technology

**TA 280** Introduction to Acting

Required for Directing emphasis:

**TA 398** Directing I

**TA 498** Directing II

**Playwriting**

Required for ALL individuals interested in a playwriting track:

**TA 240/TA 241** Introduction to Western Theatre (1 Semester ONLY)

**TA 250** Fundamentals of Design and Technology

**TA 280** Introduction to Acting

Required for Playwriting emphasis:

**TA 348** Playwriting

**TA 349** Advanced Playwriting

Students in the advanced undergraduate training program may also elect to take TA 485 (Undergraduate Internship) in addition to or in place of one production assignment.

**TURKISH**

See Department of Near Eastern Studies.

**UKRAINIAN**

See Department of Modern Languages and Linguistics.

**VIETNAMESE**

See Department of Modern Languages and Linguistics.

**WRITING PROGRAM**

See John S. Knight Writing Program, p. 311.

**YIDDISH**

See Department of Near Eastern Studies.

**YORUBA**

See Department of Modern Languages and Linguistics.

## SPECIAL PROGRAMS AND INTERDISCIPLINARY STUDIES

**Africana Studies and Research Center**

R. Harris, director (255-5218); A. Adams, A. Appiah, B. Blacksher, W. Branch, V. Carstens, W. Cross, L. Edmondson, G. Fraser, H. Gates, A. Nanji, D. Ohadike, W. Soyinka, J. Turner, M. Williams. Offices: 310 Triphammer Road, 255-4625 or 255-4626.

The Africana Studies and Research Center is concerned with the examination of the history, culture, intellectual development, and social organization of Black people and cultures in the Americas, Africa, and the Caribbean. Its program is structured from an interdisciplinary and comparative perspective and presents a variety of subjects in focal areas of history, literature, social sciences, and Swahili language and literature.

The center offers a unique and specialized program of study that leads to an undergraduate degree through the College of Arts and Sciences and a graduate degree, the Master of Professional Studies (African and Afro-American), through the university's Graduate School.

A student may major in Africana studies; however, another attractive alternative is the center's joint major program. This program enables the student to complete a major in any of the other disciplines represented in the college while at the same time fulfilling requirements for a major in Africana Studies. This requires only a few more credits than is usually the case when one completes a single major course of study. Courses offered by the center are open to both majors and nonmajors and may be used to meet a number of college distribution requirements, such as freshman writing seminars, language (Swahili), expressive arts, humanities, social sciences, and history.

The center also brings distinguished visitors to the campus, sponsors a lecture series, and houses its own library.

**The Africana Major**

The undergraduate major offers interdisciplinary study of the fundamental dimensions of the Afro-American and African experiences. Because of the comprehensive nature of the program, it is to the students' advantage to declare themselves Africana majors as early as possible. The following are prerequisites for admission to the major.

Students should submit:

- 1) a statement of why they want to be an Africana studies major;
- 2) a tentative outline of the area of study they are considering (African or Afro-American) for the undergraduate concentration; and
- 3) a full transcript of courses taken and grades received.

The center's undergraduate faculty representative will review the applications and notify students within two weeks of the status of their request.

After acceptance as a major in the Africana Center, a student must maintain a C+ cumulative average in the center's courses while completing the major program. The Africana major must complete 36 credits in courses

offered by the center, to include the following four core courses: AS&RC 231, 290, 360, and 431. Beyond the core courses, the student must take 8 credits of center courses numbered 200 or above and 15 credits numbered 300 or above. Within this selection the student must take at least one of the following AS&RC courses: 203, 204, 283, or 301. The program of an undergraduate major may have a specifically Afro-American focus or a specifically African focus.

### Joint Majors

The center encourages joint majors in the College of Arts and Sciences and in other colleges. Joint majors are individualized programs that must be worked out between the departments concerned. The center's undergraduate faculty representative, Professor Adams, will assist students in the design and coordination of joint major programs. However, in any joint major program, the center will require at least 16 credits be taken in Africana studies courses, including AS&RC 290.

### Double Majors

In the case of double majors (as distinct from joint majors) students undertake to carry the full load of stipulated requirements for a major in each of the two departments they have selected.

### Certificate in African Studies

In conjunction with the Institute for African Development, the Africana Studies and Research Center administers an undergraduate Certificate in African Studies program. The certificate is offered as a minor concentration available to students in all of the undergraduate colleges at Cornell. Many of the courses in the program might be used to fulfill other course distribution requirements. By pursuing this certificate, students acquire an interdisciplinary understanding of Africa. After developing a foundation of knowledge on the culture, society, and development of Africa in the core course "Africa: The Continent and Its People," students pursue 15 credit hours in a humanities or development studies track or a combination of the two, including an additional core course, either "African Civilizations and Cultures" or "Contemporary African Development Issues." The requirements for the certificate are a minimum of 18 credit hours, including the core courses. Students interested in the certificate program must contact Professor Adams (the center's undergraduate faculty representative) who will register them in the program and assign them a faculty adviser from their own college. The faculty adviser will be responsible for determining completion of the certificate requirements.

**Honors.** The honors program offers students the opportunity to complete a library research thesis, a field project in conjunction with a report on the field experience, or a project or experiment designed by the student. The requirements for admission to the honors program for all students—regular majors, joint majors, and double majors—are a B- cumulative average in all courses and a B+ cumulative average in the center's courses. Each student accepted into the honors program will have an honors faculty committee consisting of the student's adviser and one additional faculty member, which is responsible for final evaluation of the student's work. The honors committee must approve the thesis or project

before May 1 of the student's junior year. The completed thesis or project should be filed with the student's faculty committee by May 10 of the senior year.

### Distribution Requirement

Two Africana Studies and Research Center courses from the appropriate group may be used in fulfillment of the following distribution requirements:

Social sciences: AS&RC 171, 172, 190, 191, 208, 231, 280, 290, 301, 302, 344, 345, 346, 351, 352, 400, 410, 420, 451, 460, 481, 484, 485, 495, 550, 551, 571.

History: AS&RC 203, 204, 205, 283, 344, 350, 360, 361, 370, 381, 405, 460, 471, 475, 482, 483, 490, 510.

Humanities: AS&RC 202, 211, 219, 422, 425, 431, 432, 450, 455, 525.

Expressive arts: AS&RC 209, 285, 303, 425, 430.

Freshman writing seminars: AS&RC 100.

### Language Requirement

Swahili fulfills the College of Arts and Sciences language requirement. Successful completion of AS&RC 131, 132, 133, and 134 provides qualification in Swahili. Successful completion of AS&RC 202 gives proficiency in Swahili. Africana majors are not required to take Swahili, but the center recommends the study of Swahili to complete the language requirement.

### Courses

#### 131 Swahili

Fall. 4 credits.

T R 10:10–12:05; lab to be arranged.

A. Nanji.

Beginner's Swahili. Part 1—Grammar. Requires no knowledge of language.

#### 132 Swahili

Spring. 4 credits. Prerequisite: Swahili 131.

T R 10:10–12:05. A. Nanji.

Continued study of the basic grammatical formation of the language and the introduction of reading material ranging from songs to short stories. A great many drills help develop the student's comprehension. Swahili tapes are highly used.

#### 133 Swahili

Fall. 4 credits. Prerequisites: Swahili 131 and 132.

Arranged; language lab to be arranged.

A. Nanji.

Advanced study in reading and composition.

#### 134 Swahili

Spring. 4 credits. Prerequisite: Swahili 133.

Arranged. A. Nanji.

In this course of the sequence more emphasis is placed on the development of reading ability and the acquisition of writing skills. Students are expected to read and comprehend selected Swahili stories and write compositions on chosen topics. Ample consideration is given to oral practice in the classroom.

#### 171 Black Families and the Socialization of Black Children

Fall. 4 credits.

T R 2:55–4:10. W. Cross.

Survey of key psychological dimensions of the Black experience, covering such issues as (1) race and intelligence; (2) Black identity; (3) Black family structure; (4) Black English; (5) Black middle class; and (6) nature of Black psychology.

#### 172 The Education of Black Americans: Historical and Contemporary Issues

Spring. 4 credits.

T R 2:55–4:10. W. Cross.

This is a course designed for freshmen and sophomores that will be devoted to the history of Black education and contemporary issues in Black education, such as the struggle for Black studies, the development of independent Black schools, and problems of public schools in Black communities.

#### 190 Introduction to Modern African Political Systems

Fall. 4 credits. Offered alternate years.

M W 3:35–5. L. Edmondson.

This course directs attention to the salient characteristics of Africa's political systems and assesses the way in which continental and global factors impinge on development efforts. It is especially concerned with the impact of colonialism and the ongoing efforts by Africans to overcome its political and socioeconomic legacies. Among the specific issues to be discussed are problems of ethnic fragmentation, boundary problems, levels of political institutionalization, challenges of continental unity, neocolonialism and dependency, and Africa within the Third World and in the world system.

#### 191 Africa: The Continent and Its People

Fall. 3 credits.

T R 11:40–12:55. L. Edmondson.

An introductory interdisciplinary course focusing on Africa's geographical, ecological, and demographic characteristics; indigenous institutions and values; the triple cultural heritage of Africanity, Islam, and Western civilization; main historical developments and transitions; contemporary political, economic, social, and cultural change. Africa's ties with the United States (from trans-Atlantic slavery to the present), its impact on the emerging world order, and its contribution to world civilization will also be explored.

#### 202 Swahili Literature

Fall. 4 credits. Prerequisite: Swahili 134. Offered on demand.

A. Nanji.

Students gain mastery over spoken Swahili and are introduced to the predominant Swahili literary forms.

#### 203 History and Politics of Racism and Segregation

Fall. 4 credits.

M W 1:25–3:20. Staff.

A cross-cultural study in the historical context of the evolution of racist thought and practice in southern Africa and North America.

**204 History and Politics of Racism and Segregation**

Spring. 4 credits.

M W 11:15–12:10. L. Edmondson.

The course will deal with the historical patterns of racism and segregation using southern Africa and North America as case histories. The study will be undertaken within a theoretical framework that broadly defines racism and segregation and their implication.

**205 African Civilizations and Culture**

Spring. 3 credits.

T R 11:40–12:55. D. Ohadike.

May be used for history requirement. This course is concerned with the development of African civilizations and cultures from the earliest times to the present day, together with their contributions to world history. The aim is to promote the understanding of Africa and the appreciation of its cultural forms through the study of the continent's social, political, and economic structures. The approach is multidisciplinary. The course deals with the civilizations of North Africa, the Nile Basin, and Ethiopia (examples: Carthage, Egypt, Kush, and Meroa); the kingdoms and empires of Sub-Saharan Africa (examples: Ancient Ghana, Mali, Songhai, Oyo, Benin, Kongo, and Nwene Mutapa); African kinship systems; religions; healing systems, music, political philosophy, and mechanisms of social control. The course also looks at the impact of Islam and Christianity on the development of African cultures.

**[208 Gender, Race, and Medical "Science"]**

Fall. 3 credits. Not offered 1990–91.

T R 11:40–12:55. G. Fraser (on leave, 1990–91).

The course will examine the social construction of race and gender in the medical sciences from the turn of the century to the present. Beginning with readings that propose a new view of scientific medicine as a system of signs and symbols and as culturally embedded, we will proceed to an examination of some of the following topics: racism and experimentation; the treatment of venereal disease and tuberculosis; the demise of social childbirth; the body as a medical product; menstruation as pathology; the monitored mind; women and psychiatry; the political economy of health care; medical authority; the training of medical students; political anatomy of the body; sites of resistance; alternative systems; and cross-cultural case studies.]

**[209 Introduction to African Dance (also Theatre Arts 209)]**

Fall. 3 credits. Not offered 1990–91.

T R 10:10–11:25. F. Ajayi.

An introduction to ancient African dance forms, origins, socio-economic, and political significance; the state of the dances, changes, and continuing relevance in contemporary times. The course will also look at the evolution and significance of contemporary dance forms.]

**211 West Indian Literature from Abroad**

Fall. 3 credits.

T R 10:10–11:25. A. Adams.

"Writing home": writing by West Indians who have emigrated to North America, Europe, or Africa, but whose cultural, social, psychological, spiritual center of gravity remains the Caribbean (or its transplanted manifestation in the new domicile). Whether experienced as "exile," as with Lamming, "loneliness," as with Selvon, or as a search for the diasporic connection with the continent of ancestry, as

with Conde, the West Indian literary artist abroad is, in some form, "writing home."

**219 Issues in Black Literature**

Fall. 4 credits. Offered alternate years.

An examination of literature written for Black children, including an analysis of the literature as it pertains to Black life from 1960 to the present. Students write a pamphlet containing their essays, fiction, and poetry and compile a bibliography of literature for Black children.

**231 Black Political Thought**

Fall. 3 credits. Offered in alternate years.

T R 11:40–12:55. J. Turner.

This is an introductory course that will review and analyze the major theoretical and ideological formulations developed and espoused by African-Americans in the struggle for liberation. This semester we will focus specifically on the political philosophy and historical significance of Malcolm X, and the work and movement of Marcus Garvey, as the prime movers of nationalism and pan-Africanism among Black people in this century. Such themes as slave resistance, nationalism, pan-Africanism, emigration, anti-imperialism, socialism and internal colonialism, and the political and social views of Black women will be discussed. Black political thought will be viewed in its development as responses to concrete conditions of oppression and expression.

**280 Racism in American Society**

Fall. 3 credits.

W 7:30–10 p.m. D. Barr and J. Turner.

This course will be a topical treatment of the history and theory of racism in the United States. The course will begin with an examination of basic concepts and theories of racism. From there we will examine the history of racial groups in America—African Americans, Native Americans, Asian Americans, and the Hispanic groups. Particular attention will be paid to the political economy of racism and the sociological and the psychological aspects of race relations in America, with specific reference to the differences and intersections of race, class, gender, and ethnicity.

**283 Black Resistance: South Africa and North America**

Fall. 4 credits. Offered alternate years.

Staff.

A study of Black political movements in South Africa and North America and their responses to the situations of race relations that formed the contexts of their operations.

**285 Black Theater and Dramatic Literature**

Fall. 3 credits.

T R 4:30–5:50. W. Branch.

This course is an introduction to the history of literature of Black drama. It also provides an opportunity for students to cultivate an interest in individual and group presentation of Black dramatic materials. Students who successfully complete this course will be granted preference for the limited enrollment in AS&RC 425 (Advanced Seminar in Black Theatre and Dramatic Literature), which produces a public performance in the spring.

**290 The Sociology of the Black Experience**

Fall. 3 credits.

T R 1:25–2:40. J. Turner.

An introductory course to the sociology of the Black experience and to the field of Afro-American studies. Required for all undergraduate students majoring at the Africana Center. The course surveys the early culture and development of Black people and their role in world civilization and concentrates on the cultural heritage and social experience of Black people in the United States in particular.

**301 Oppression and the Psychology of the Black Social Movement**

Spring. 4 credits.

R 10:10–12:05. W. Cross.

The focus of the course will be conversion experiences within the context of social movement. The development of political groups (for example, the Black Panther Party) and outstanding activist-intellectuals (such as Malcolm X) are used as reference points for discussion of social movement theory.

**302 Social and Psychological Effects of Colonialization and Racism**

Spring. 4 credits. Offered alternate years. Staff.

**303 Blacks in Communication Media**

Spring. 3 credits.

W 2:30–5. W. Branch.

The focus is on the general theory of communications, the function of media in an industrialized society, and the social, racial, and class values implied in the communication process. There is a term paper and screenings of significant American and Third World films.

**[309 African Dance Aesthetics: Practice and Theory]**

Spring. 3 credits. Not offered 1990–91.

T R 10:10–11:25.

An examination of the aesthetics of African dance styles and forms within the cultural perspectives of African peoples. Monday and Wednesday classes will consist of learning basic movement vocabulary and dances, with lectures and discussions on Fridays. Practical sessions will explore the dynamics of African dances as non-verbal artistic forms communicating a world view, with an end of semester studio showing. The course will concentrate particularly on West and East Africa.]

**344 Neocolonialism and Government in Africa (The Politics of Public Administration)**

Fall. 4 credits. Offered alternate years.

T R 1:25–2:15.

The course is designed to explain why Africa's public administrations in the postcolonial era have generally failed to move from the colonialist ethos to becoming primary instruments for initiating and guiding the processes of development. The reality of colonialism was bureaucratic centralism—the closest approximation to the ideal type of a pure administrative state specializing in law and order. Colonial administrations resembled armies in their paramilitary formation and ethos and were, indeed in a number of cases, the instruments of military men. Much attention focuses on the internal characteristics of bureaucratic organizations in Africa and their relationship to their social and political environments.



### 345 Afro-American Perspectives in Experimental Psychology (also Psychology 345)

Spring. 3 or 4 credits. Prerequisite: an introductory course in psychology or AS&RC 171. Offered alternate years.

### 346 African Socialism and Nation Building

Spring. 4 credits.

An exploration and critical analysis of the various theories of African socialism as propounded by theorists and practitioners. Those ideas, extending from Nyerere's Ujamaa (for example, traditional social and economic patterns of African society) to Nkrumah's scientific socialism (such as the desirability and practicality of the Marxist type of socialism in Africa) are compared.

### 350 The Black Woman: Social and Political History

Spring. 3 credits. Offered alternate years. Hours to be arranged.

This course will address the social organizations, political protests, and political ideologies written by or about Black women in the United States, from the time of slavery to the 1980s. Topics will include the special role of Black women in slavery, the political-protest thought of Black women writers in the nineteenth and twentieth centuries (e.g., Ida B. Wells, Mary Church Terrell, Ella Baker, Mary McLeod Bethune, Eleanor Holmes Norton, Angela Davis), the emergence of Black feminism, and the various social-political controversies surrounding the relationship of Black women to both the civil rights and Black power movements.

### 352 Pan-Africanism and Contemporary Black Ideologies

Spring. 4 credits. Offered alternate years.

A historical study of pan-Africanism that reviews and analyzes the literature and activities of early Black pan-African theorists and movements.

### 360 Ancient African Nations and Civilizations

Fall. 3 credits. Offered alternate years. M W F 1:25–3:20. Staff.

An introduction to African history beginning with early civilizations in pre-colonial Africa.

### 361 Introduction to Afro-American History (from African Background to the Twentieth Century)

Fall. 3 credits. Offered alternate years. M W F 10:10–11. R. Harris.

Surveys the transition of Africans to America through the process of enslavement and their transformation into Afro-Americans. Explores the transition from slavery to freedom through the process of emancipation and the transformation of Afro-Americans from chattel slaves into rural peasants. Its purpose is to understand the internal dynamics of the Black experience from African origins to the age of segregation.

### 370 Afro-American History: The Twentieth Century

Spring. 3 credits. Offered alternate years. M W F 12:20–1:10. R. Harris.

Examines the transition of Afro-Americans from countryside to city through the process of migration and urbanization and their transformation into industrial laborers. Probes the transition from segregation to civil rights through the process of protest and the transformation of Afro-Americans from second-class into first-class citizens. The purpose is to

understand historical antecedents for the current socioeconomic, political, and cultural status of Afro-Americans.

### 381 Contemporary African History

Spring. 3 credits. Offered alternate years. M W F 1:25–2:15. D. Ohadike.

A survey of the current problems on the African continent as they have appeared from 1500 to the present time. Important topics include the impact of the Atlantic slave trade, the European scramble of 1884, various forms of African resistance to colonial occupation in 1914, and the prospects of protracted social unrest in Africa south of the Zambezi River.

### 382 Comparative Slave Trade of Africans in the Americas

Fall. 3 credits. Offered alternate years. T R 1:25–2:30.

The focus is on eighteenth- and nineteenth-century slave societies in Virginia and South Carolina and the eighteenth-century slave societies in San Domingue or Haiti and to some extent in Jamaica. The slave society in Cuba during the latter part of the nineteenth century is studied.

### 400 Political Economy of Ideology and Development in Africa

Spring. 4 credits. Offered alternate years. T R 11:15–12:40. L. Edmondson.

An exploration of the processes of African underdevelopment, ranging from historical foundations to contemporary international dynamics. Rival theories of underdevelopment, contending models of development, and competing ideologies will be explored. Common African postures as manifested in the "Lagos Plan of Action for the Economic Development of Africa, 1980–2000" and in the north-south dialogue will also be assessed.

### 405 Political History of the Age of Booker T. Washington and W. E. B. DuBois

Spring. 4 credits. Offered alternate years.

A review of the intellectual and political history of the Black experience in the United States from 1890 to the eve of World War II. Although the course concentrates on two of the outstanding Black historical figures of the period, Booker T. Washington and W. E. B. DuBois, other personalities and leaders within Black social and political history will be examined—including Marcus Garvey, T. Thomas Fortune, A. Philip Randolph, Charles S. Johnson, William Monroe Trotter, and James Weldon Johnson. Major Black issues, such as the intellectual debates between DuBois and Washington, and DuBois versus Garvey, will constitute a critical part of the discussion.

### 410 Black Politics and the American Political System

Fall. 4 credits. W 2:30–4:25. J. Turner.

The central thesis of African American politics has been its movements for political change and democratic access and human rights. This development since the seventeenth century is a complex political legacy. This course will conduct a close study of African American political practice and theoretical analysis of the American political system. Implications of the political systems for prospects and limitations to participation by Black people will be analyzed. Critical historical stages in the process of Black politics will be examined. The development of electoral offices in federal and statewide politics, and the significant urban political power bases giving rise to

African American mayoralty politics in critical industrial centers, as well as rural hamlets will center the course. Presidential politics—the Jesse Jackson campaigns—and new political formations including Black Republicans/conservatives will constitute the emphasis on contemporary events. The course will review the development of the literature in African American politics.

### 420 Social Policy and the Black Community:

Spring. 4 credits. W 2:30–4:30. J. Turner.

The socioeconomic conditions of the Black urban community will be the central focus of the course. Community development models will be explored in relationship to the social needs of the Black populations. The changing configuration of internal organization of the Black community nationally will be examined.

### 422 African Literature

Fall. 4 credits. M 1:25–3:55. A. Adams.

Women writers of Africa will be the focus of attention in this course. Questions of gender as well as complementary issues of equal importance in the artistic vision and expression of the woman writer in Africa will be considered in the works of Mariama Ba, Ama Ata Aldoo, Buchi Emecheta, Aminata Sow Fall, Bessie Head, as well as some "newer" writers. All works will be read in English.

### 425 Advanced Seminar in Black Theater and Dramatic Literature

Spring. 4 credits. Enrollment limited. T R 4:30–5:50. W. Branch.

This course will be devoted to the study, rehearsal, production, and public performance of a play or plays drawn from the annals of Black American dramatic literature. Students will participate in all the various phases and categories of theatrical production, from acting to production crews to theater group management. A field trip to a Black theater attraction in New York City will also be arranged if possible. Students who have successfully completed AS&RC 285 (Black Theater and Dramatic Literature) will be granted preference for the limited enrollment in this course.

### 430 African American Creative Writing Seminar

4 credits. T R 2:55–4:10. W. Branch.

This course will afford to a limited number of students who have expressed both interest and aptitude in creative writing the opportunity to concentrate on the production of a piece of writing in either fiction or drama that proceeds from an Afro-centric wellspring. In addition, students will gain critical standards of evaluation through the examination and discussion of "role-model" materials from African American literature and drama as well as considerations of the work of their fellow students in the seminar.

### 431 History of Afro-American Literature

Fall. 4 credits. Offered alternate years. An extensive examination of the impact that Afro-American literature has had on describing, explaining, and projecting the Afro-American experience from 1619 to the present.

**432 Modern Afro-American Literature**

Spring. 4 credits. Offered alternate years.  
A study of fiction by Black writers, focusing on the political and sociological component that influenced the development and growth of Black writing in relationship to literary themes and attitudes current in specific periods and movements from post-World War I to the present.

**[450 Body Aesthetics or Body Politics: Images of the Woman in West African Art Forms]**

Fall. 3 credits. Not offered 1990-91.  
W 12:20-2:15.

Examines the body image of the woman as represented in various West African art forms to determine the extent to which the art forms become mediums for: validating the prescribed status of the women in society, suppressing the actual perception of the woman, and re-evaluating the archetypal woman and presenting the woman from a different perspective.]

**451 Politics and Social Change in the Caribbean**

Fall. 4 credits.  
T R 2:55-4:25. L. Edmondson. Offered alternate years.

A study of the historical, geostrategic, political, economic, and social (including racial and cultural) forces bearing on the domestic and international experiences of Caribbean societies. Special attention will be given to conflicting definitions and perceptions of the Caribbean; contending theories of Caribbean social structure and models of development; the continuing salience of struggles for change and transformation; prospects of regional integration; and Caribbean challenges to the global system, especially with regard to the region's relations with the United States in the context of the East-West conflict and its position in the Third World in the context of the North-South cleavage.

**455 Modern Caribbean Literature**

Spring. 4 credits.  
M 1:25-3:55. A. Adams.

This course will examine the prose literature of the Caribbean islands. Through the reading of several novels and short stories from the various languages and cultural strains that comprise the Caribbean societies, students will study the points of commonality and the diversity within this body of literature. The recurrence of certain historical, social, and cultural issues that have formed the multi-ethnic Caribbean peoples will be analyzed in their varying manifestations across the linguistic and other boundaries to uncover the underlying shared experience.

**[460 African Philosophy and the Origins of Major Western Religions]**

Fall or spring. 4 credits. Not offered 1990-91.  
M 3:35-6.

The overall objective of this course is to develop in the student an understanding of the origins of the philosophical, theosophical, and magic-religious teachings that were responsible for producing what is today called Judaism, Christianity, and Islam. From this juncture the most basic works and teachings from the Nile Valley and the Great Africans Lakes, and African religions will be compared to the adoptions in Hebrew, Christian, and Moslem religions, as well as in what is today called Greek philosophy.]

**471 Black Emancipation in Comparative Perspective (also History 471)**

4 credits. Limited to 8 students. Letter grade only.

T 2:30-4:30. D. Ohadike.

This course will explore the black emancipation experiences in comparative perspective. Primary emphasis will be on Africa and the United States; secondary focus will be the Caribbean and Latin America. The African component will investigate social consequences of emancipation, the transformations that accompanied that process, and experiences of ex-slaves. Perspectives on the Americas will include the complexities of emancipation, its socio-economic results and the legacy of race relations.

**475 Black Leaders and Movements in Afro-American History**

Spring. 4 credits. Offered alternate years.

T R 2:55-4:10. R. Harris.

Analyzes the personalities, ideas, and activities central to the struggle for Afro-American liberation from the eighteenth-century to the present. Examines theories of leadership and the structure of protest movements with the goal of understanding current leadership needs and trends among Afro-Americans.

**[481 Peoples, Culture and Sociology of Caribbean]**

4 credits. Not offered 1990-91.

R 1:25-3:20. G. Fraser (on leave, 1990-91).

May be used for social science requirement. This course considers the socio-cultural continuities and differences in what M. G. Smith has called the "plural societies" of the Caribbean. Emphasis will be placed on the anthropological approach to understanding historical and contemporary lifeways. Using ethnographies as well as literary works, we will examine, for example, rural and urban family structure, male-female relations, religious movements, healthcare, migration patterns, markets, and individual and ethnic identity to develop a full portrait of both mainland and island societies in the region.]

**483 Themes in African History**

Fall. 4 credits.  
M W 1:25-3:20, plus one hour to be arranged. Staff.

Designed to expose the student to what has been referred to as the particular aspects of African history. The survey approach will be adopted in the treatment of selected themes, and use will be made, when necessary, of the work done in auxiliary disciplines. The study will be along the following lines: (a) selected African heroines; (b) women in traditional African societies; and (c) African women in the twentieth-century industrial societies.

**484 Politics, Conflict, and Social Change in Southern Africa**

Fall or spring. 4 credits.  
T 10:10-12:05. L. Edmondson.

The focus is on escalating conflicts and ongoing transformations in South Africa and the increasingly salient issue of U.S. relations with the apartheid regime. Topical emphases include the heightening contradictions of apartheid; the rising tide of Black resistance; women under and against apartheid; South Africa's relations with its neighbors; geopolitical, economic, and racial dimensions of the American connection; the disinvestment-divestment debate; and the Reagan administration's "constructive engagement" policy under challenge. Instructor's lectures

will be supplemented by films, class discussion, and guest lectures.

**485 Racism, Social Structure, and Social Analysis Seminar**

Spring. 4 credits.  
W 2-4:25. J. Turner.

An examination of the social structure of American society and the relationship of racial and class categories to social stratification. An analysis of power structures and the social salience of socioeconomic connections of government decision makers and the corporate structure is developed.

**490 Advanced Reading and Research Seminar in Black History**

Spring. 4 credits.  
M W 1:25-2:15. Staff.

The seminar is designed to help students acquaint themselves with the available sources of information and materials in Black history, as well as make the maximum use of their own inclinations and interests in unearthing the material and creating a body of comprehensive conclusions and generalizations out of them.

**495 Political Economy of Black America**

Spring. 4 credits.  
M W 10:30-12:05.

An examination of the role that Black labor has played in the historical development of U.S. monopoly, capitalism, and imperialism. Emphasis is on the theory and method of political economy and a concrete analysis of the exploitation of Black people as slave labor, agricultural labor, and proletarian labor.

**498-499 Independent Study**

498, fall; 499, spring.  
Hours to be arranged. Africana Center faculty.

For students working on special topics, with selected reading, research projects, etc., under the supervision of a member of the Africana Studies and Research Center faculty.

**500 Political Theory, Planning, and Development in Africa**

Spring. 4 credits. Offered alternate years.  
T R 11:15-12:45.

The course explores the processes of underdevelopment of Africa from the epoch of slavery through colonial and neocolonial phases of domination, drawing on the assumptions of "underdevelopment" theory à la G. Frank, Walter Rodney, and others. It then takes up the differential content and emphasis on socialistic and capitalistic strategies by highlighting the interaction of political and economic forces. Case studies are drawn from Ghana, Kenya, and Tanzania.

**505 Workshop in Teaching about Africa**  
4 credits. Prerequisites: AS&RC 203 and 204 or AS&RC 360 and 361 or permission of instructor. Offered alternate years.

**510 Historiography and Sources: The Development of Afro-American History**

Fall. 4 credits. Prerequisite: upperclass or graduate standing or permission of instructor.  
T 9:30-12:05. R. Harris.

Studies the way Black historians in particular have explained the Afro-American past. Examines the development of writing on Afro-American history from the earliest writers to the present. Seeks to determine the principles for interpreting Afro-American history. Acquaints participants with the methodologies and sources central to understanding the Afro-American experience.

**515 Comparative Political History of the African Diaspora**

Fall. 4 credits. Prerequisite: upperclass or graduate standing or two of the following courses: AS&RC 203, 204, 283, 360, 361, 475, 484, 490. Offered alternate years.  
Staff.

**520 Historical Method, Sources, and Interpretation**

Fall. 4 credits. Prerequisite: upperclass or graduate standing or two of the following courses: AS&RC 203, 204, 361, 475, 484, 490. Offered alternate years.  
Staff.

**550 Transnational Corporations in Africa and Other Developing Countries**

Spring. 4 credits. Prerequisite: upperclass or graduate standing or permission of instructor. Offered alternate years.  
Examines the role of transnational enterprises as an economic and political factor in the Third World, their relations with the host government, and their interaction with both the private and public sectors of the economy of the host country. Special emphasis on Africa and Latin America.

**571 Graduate Seminar in Black Psychology**

Fall. 4 credits. Prerequisite: permission of instructor.

R 9:05–12:05. W. Cross.

This is an upper-level undergraduate and graduate seminar devoted to psychological issues in the Afro-American experience. This seminar will examine the theoretical and empirical literature of Black family-kinship systems and Black self-concept.

**598–599 Independent Study**

598, fall; 599, spring. Variable credit. For all graduate students.

**698–699 Thesis**

698, fall; 699, spring. Limited to Africana Studies and Research Center graduate students. Africana Center faculty.

**Agriculture, Food, and Society Concentration**

F. H. Buttel, A. G. Power, coordinators;  
G. Altschuler, M. M. Devine, M. J. Esman,  
J. Fessenden-Raden, C. C. Geisler, A. Gillespie,  
B. Ginsberg, C. J. Greenhouse,  
D. J. Greenwood, S. L. Kaplan, D. R. Lee,  
T. J. Lowi, T. F. Lynch, T. A. Lyson,  
P. L. Marcus, P. McMichael, V. Nee, D. I. Owen,  
D. Pimentel, N. T. Uphoff, D. Usher,  
M. W. Wachsberg. Office: 275 Clark Hall,  
255-6042.

Agriculture, food, and society is an interdisciplinary concentration that is designed to introduce students to the study of agricultural and food issues from diverse perspectives within the liberal arts. The concentration seeks to make available to students a coherent program of study in which the role of agriculture in modern or prehistorical-historical and developed or developing societies can be understood in biological, social, scientific, and humanistic perspective. The concentration draws on courses in several colleges—in particular the Colleges of Arts and Sciences, Agriculture and Life Sciences, and Human Ecology.

Members of the concentration committee, which consists of faculty from each of the major colleges from which courses in the concentration are drawn, serve as advisers in

the program. The committee is administered through the Biology and Society Major (office: 275 Clark Hall, 255-6042).

**Basic Requirements**

The requirements for the agriculture, food, and society concentration are designed to ensure a broad background in the biological, socioeconomic, and humanistic dimensions of agricultural and food issues. These requirements include foundation courses in biology plus a minimum of six courses and 18 credits of electives.

Students enrolling in the concentration should take the following foundation courses in biology to prepare themselves for course work in agricultural science: a two-semester introductory biology sequence selected from Biological Sciences 109–110, 105–106, or 101–102 plus 102–104. (Advanced placement in biology with a score of 4 or 5, or Biological Sciences 100, offered during the six-week Cornell summer session for 7 credits, also satisfies the biological sciences requirement). These courses may be used to meet group 1 (physical or biological sciences) distribution sequence requirements in the College of Arts and Sciences.

It is recommended (but not required) that students in the agriculture, food, and society concentration elect one or more freshman writing seminars with agriculturally related content to meet basic college requirements for graduation. A list of agriculturally related freshman writing seminars to be offered in 1990–91 is available from the Biology and Society office.

For further information and a complete list of courses that can be used to fulfill the concentration requirements, students should contact the Biology and Society office, 275 Clark Hall, 255-6042.

**American Indian Program**

R. LaFrance, acting director (300 Caldwell Hall, 255-6587)

The American Indian Program (AIP) is a multidisciplinary, intercollege program consisting of academic, student support, research, extension, and publications–public relations components.

**Academic component.** The AIP offers courses that increase all students' awareness of the unique heritage of American Indians. Students are challenged by such topics as the sovereign rights of Indian nations and the contemporary relevance of Indian attitudes toward the environment. The program's instructional core consists of courses focusing on American Indian life with an emphasis on the Iroquois and other Indians of the Northeast. Core courses are supplemented by a variety of offerings from several departments.

The student support staff help Indian students complete an enriched Cornell education by coordinating academic tutoring, financial aid, personal counseling, and other student services.

**Research.** Research priorities include education, social and economic development, agriculture, wildlife management, and cultural preservation.

**Extension.** The AIP's cooperative extension unit seeks to develop solutions to problems identified by Indian people. In this way the AIP can stimulate the application of institutional expertise and resources to community needs.

**Publications and public relations.** AIP publishes its own multidisciplinary journal, *Northeast Indian Quarterly* and sponsors conferences, guest lectures, and forums on important national and local Indian issues, past and present. AIP also contributes articles and information to the national Indian press.

For full descriptions of the following courses, consult the listings under individual departments.

**The Indian Traditions**

**Rural Sociology 100 American Indian Studies: An Introduction**

**Rural Sociology 318 An Ethnohistory of the Haudenosaunee: The Six Nations Iroquois Confederacy**

**Anthropology 230 Cultures of Native North America**

**Anthropology 242 American Indian Philosophies I: Power and World Views (also Rural Sociology 242)**

**Anthropology 354 The Peopling of America**

**Music 223 Music of the American Indian**

**Indians in Transition**

**Anthropology 318 Ethnohistory of the Iroquois**

**History 209 Political History of Indians in the United States**

**History 219 Freshman Writing Seminar: History of North American Indians**

**History 323–324 Native American History**

**History 381–382 Content and Form of Iroquois Diplomacy**

**Rural Sociology 442 North American Indian Philosophies**

**History 429 American Indians in Eastern North America**

**History 624 Graduate Seminar in American Indian History**

**Contemporary Issues**

**Anthropology 243 American Indian Philosophies II: Native Voices (also Rural Sociology 243)**

**Anthropology 442 American Indian Philosophies: Selected Topics**

**Rural Sociology 175 North American Indians From 1890 to the Present**

**Rural Sociology 440 Social Impact of Rapid Resource Development**

**Independent Study**

Independent study courses in departments; students must have approval of an American Indian studies faculty member.

### Center for Applied Mathematics

The Center for Applied Mathematics administers a broadly based interdepartmental graduate program that provides opportunities for study and research over a wide range of the mathematical sciences. This program is based on a solid foundation in analysis, algebra, and methods of applied mathematics. The remainder of the graduate student's program is designed by the student and his or her Special Committee. For detailed information on opportunities for graduate study in applied mathematics, students should contact the director of the Center for Applied Mathematics, 305 Sage Hall.

There is no special undergraduate degree program in applied mathematics. Undergraduate students interested in an application-oriented program in mathematics may select an appropriate program in the Department of Mathematics, the Department of Computer Science, or some department of the College of Engineering.

A listing of selected graduate courses in applied mathematics can be found in the description of the center on page 16.

### Asian American Studies Program

The Asian American Studies Program is a university-wide program within the College of Arts and Sciences. Its aim is to promote teaching, research, and cultural activities related to Americans of Asian heritage. The program functions as a teaching and resource center to serve the educational needs of the general Cornell community as well as those of the Asian American community. It is intercollegiate in nature with links to all the schools and colleges of the university. The teaching program offers a number of broad basic courses dealing with the Asian American experience that are offered in any of the participating colleges, depending on content and faculty affiliation. It encourages the incorporation of more specific Asian American content into the mainstream curriculum of the university by providing financial resources and substantive support to faculty members interested in developing new courses and adding pertinent materials to existing courses. The Course Development Grants Program has been established for this purpose. The staff in the program will work toward establishing one or more academic concentrations in the future.

### Research

The research program encourages and stimulates research on Asian American topics by functioning as a resource and activity center for its affiliated members as well as the general Cornell community. It sponsors activities designed to facilitate dialogue and interchange among faculty from a variety of disciplines and strives to promote collaborative research among its members. To this end, the Research Grants Program has been instituted to provide seed money to faculty and students for research on Asian American topics.

### Art and Culture

The third dimension of the program is to foster and promote Asian American culture and art. The program functions as a resource center and a place for social interaction among Asian American students and members of the Cornell community. In this capacity the program sponsors events aimed not simply at enhancing Asian American students' sense of identity but

also at developing an appreciation for the creative aspects of the heritage of Asian Americans among all members of the Cornell community.

### Affiliated Faculty

Lee C. Lee, director (Human Development and Family Studies); R. Barker (Agricultural Economics), M. L. Barnett (Rural Sociology and Asian Studies), T. Chaloeintarana (Southeast Asia Program), P. Chi (Consumer Economics and Housing), M. C. Chou (Asian Studies), B. de Bary (Asian Studies), D. Gold (Asian Studies), J. C. T. Huang (Modern Languages and Linguistics), K. A. R. Kennedy (Ecology and Systematics), J. V. Koschmann (History), L. C. Lee (Human Development and Family Studies), D. R. McCann (Asian Studies), K. March (Anthropology and Women's Studies), T. L. Mei (Asian Studies), V. Nee (Sociology), R. E. Ripple (Education), N. Sakai (Asian Studies), P. S. Sangren (Anthropology), C. L. Shih (Modern Languages and Linguistics), R. J. Smith (Anthropology), M. W. Young (History of Art)

### Courses

#### 110 Introduction to Asian American Studies

Fall. 3 credits.

T R 2:55-4:10. Staff.

This introductory course examines the historical roots of Asians in America—the causes and sources of Asian immigration to the United States, the experiences of these pioneers, and their major role in the development of the western states. It also examines the U.S. response to these Asian immigrants, and analyzes contemporary issues such as self-worth, identity, and the influences of mass media.

#### 262 Asian American Literature

Spring. 3 credits.

Staff.

This course explores the diverse worlds of past and present Asian America through critical reading of selected works by Asian American writers. Emphasis is on helping students locate and develop their own points of view with regard to America as a pluralistic society with a diverse and evolving literary heritage. Topics covered include the oral tradition; the creative process for Asian American writers; incarceration and resistance; generation, gender, and community; and diversity and evolution. Students will keep a reading journal with entries focusing on connections among what is read, class discussion, and perceptions of life.

#### 435 Asian American Images and Stereotypes in Film

Fall. 3 credits. Prerequisite: AAS 110 or permission of instructor.

Staff.

This course examines images of Asian Americans in domestically produced film and television and analyzes these images with a historical and socio-cultural framework. Within this context, film and media theory are used to assess the impact of these images on viewers. Students' projects will include the creation of a video or a paper using images that more realistically reflect Asian American life and issues.

### 610 Asian Americans, Civil Rights, and the Law

Fall. 3 credits. Prerequisite: Seniors may enroll with permission of instructor.

M 1-3:30. R. J. Chin, J. Moy.

This course examines major immigration and civil rights laws and Supreme Court cases which have impacted Asians in America. Topics include America's immigration policy; alien land laws and Asian American community development; Japanese American internment; the failure of the Constitution and the redress and reparations movement; Asian women and the law; Asian labor; voting rights and Asian empowerment; anti-Asian violence and the criminal justice system; equal education opportunity and contemporary legal issues in Asian American communities (from the "English only" initiative to new immigration bills). American laws and Supreme Court cases will be analyzed, and the treatment of Asian Americans and other minority groups within the American system will be contrasted.

### Biology and Society

F. H. Buttel, chair, biology and society (275 Clark Hall, 255-6042); A. G. Power, director of undergraduate studies, colleges of Arts and Sciences and Agriculture and Life Sciences; V. Utermohlen, advising coordinator, College of Human Ecology; R. Battistella, B. Bedford, A. Boehm, R. Boyd, U. Bronfenbrenner, emeritus, S. M. Brown Jr., emeritus, S. Ceci, B. Chabot, C. C. Chu, J. Ford, J. Fortune, C. Geisler, M. Gilliland, S. Gilman, D. Gurak, J. Haas, M. A. Harwell, R. Howarth, H. C. Howland, S. Jasanoff, K. Kennedy, B. Knuth, A. Lemley, M. Lenzenweger, S. A. Levin, B. A. Lewis, J. Fessenden MacDonald, K. S. March, L. Palmer, A. Parrot, D. Pimentel, D. L. Poston, Jr., W. Provine, H. Ricciuti, emeritus, S. Robertson, R. Root, M. Small, H. Stinson, N. Sturgeon, J. M. Stycos, P. Taylor, M. W. Wachsberg

The biology and society major is offered to students enrolled in the College of Arts and Sciences and the College of Human Ecology. Undergraduates in the College of Agriculture and Life Sciences can develop an approved sequence of courses from the biology and society curriculum under general studies. The major is coordinated for students in all colleges through the biology and society office. Students can get information, specific course requirements, and application procedures for the major from the office in 275 Clark Hall.

Because the major is multidisciplinary, students must attain a basic understanding of each of the several disciplines it comprises. These include introductory courses in the fields of ethics, history or philosophy, biochemistry, ecology, genetics, evolutionary biology, and statistics. In addition, majors are required to take a core course and must develop a theme: a coherent and meaningful grouping of six courses representative of their special interest in biology and society. Students should develop the theme and select the courses in consultation with a member of the biology and society faculty. Courses must be above the 100 level, at least 3 credits, and taken for a letter grade if used to fulfill a major requirement.

There are student advisers and faculty available (according to posted office hours or by appointment) in the biology and society office, 275 Clark Hall or 278 Clark Hall (advising office), to answer questions and to provide assistance.



## Admission to the Major

### Arts and Sciences and Agriculture and Life Sciences

Students should have completed a year of college-level biology and submit an application during their sophomore year. Juniors are considered on a case-by-case basis. Upper-division applicants should realize the difficulties of completing the major requirements in fewer than two years. The application includes (1) a one- to two-page statement explaining the student's intellectual interests in the biology and society major and why the major is consistent with the student's academic goals and interests; (2) a selected theme in the major; (3) a tentative plan of courses fulfilling biology and society requirements, including courses taken and those the student plans to take; and (4) a transcript of work taken at Cornell University and elsewhere if applicable, current as of the date of application.

Acceptance into the major requires completion of the course sequence in introductory biology. Sophomores in the process of completing this prerequisite may be admitted to the major on a *provisional* basis. It is the student's responsibility to assure that final acceptance is granted on satisfactory completion of the introductory biology sequence. Although only introductory biological science is a prerequisite for acceptance, students will find it useful to have completed some of the other requirements (listed below) by the end of their sophomore year, preferably in the first semester.

### Human Ecology

Human Ecology students should consult the current Human Ecology Guide and meet with the college advising coordinator, Virginia Utermohlen, N206a Martha Van Rensselaer Hall, 255-2136.

### Major Requirements

- 1) Basic courses
  - A. Biological sciences 101-104 or 105-106 or 107-108
  - B. College calculus (one course): Math 106, 111, 112 or any higher-level calculus course
  - C. General chemistry (one-year sequence): Chem 103-104, 207-208, or 215-216.
- 2) Foundation courses (should be completed by the end of the junior year): one course in *each* subject area
  - A. Ethics: B&Soc 205 (also Bio Sci 205 and Phil 245) or B&Soc 206 (also Bio Sci 206 and Phil 246)
  - B. History or philosophy: Phil 381 or 389, or B&Soc 288 (also Hist 288 and Bio Sci 202), or Bio Sci 207 (also Hist 287), or Hist 282
  - C. Biochemistry: Bio Sci 231 or 330 or 331
  - D. Ecology: Bio Sci 261
  - E. Genetics: Bio Sci 281 or 282 or Pl Br 225
  - F. Evolutionary Biology: Bio Sci 378
  - G. Statistics: Stat 200, ILR 210, Ag Ec 310, Ed 353, Soc 301, Psych 350, Math 372, Econ 319, OR&IE 370, Stat 215, or Stat 601

- 3) Core courses (one course)
  - A. 301 Biology and Society: The Social Construction of Life (also Biological Sciences 301)
  - B. Phil 286: Science and Human Nature
- 4) Themes (six courses above the 100 level)
  - A. Natural Sciences issues (one course)
  - B. Social sciences issues (one course) and elective (one course)
  - C. Humanities issues or elective, or additional social sciences elective (one course)

*Note:* If 301 is taken as the core course, a humanities course must be taken to fulfill this requirement.

- D. Biology elective (one course)
- E. Senior seminar (one course *in the senior year*). Courses change yearly.

### Themes in the Major

Students are encouraged to develop their own themes in a concentration area. Examples include biology, behavior, and society; biology and human population; biology and public policy; environment and society; food, agriculture, and society; and health and society. Sample theme areas are available in the biology and society office.

### Independent Study

Projects under the direction of a biology and society faculty member are encouraged as part of the program of study in the student's theme area. Applications for research projects are accepted by individual faculty members. Biology and Society majors may enroll for 1-4 credits in Biology and Society 375 (Independent Study) with written permission of the faculty supervisor and may elect either the letter grade or the S-U option. Biology and Society majors from the colleges of Arts and Sciences and Agriculture and Life Sciences may elect to do an independent study project as an alternative to, or in advance of, an honors project. Applications and information on faculty research, scholarly activities, and undergraduate opportunities are available in the biology and society office, 275 Clark Hall. Independent study credits may not be used in completion of the major requirements.

### Honors Program

The honors program is available to biology and society majors from the colleges of Arts and Sciences and Agriculture and Life Sciences and is designed to challenge the academically-talented undergraduate student. Students who enroll in the honors program are given the opportunity to do independent study and to develop the ability to evaluate research dealing with issues in biology and society. Students participating in the program should find the experience intellectually stimulating and rewarding.

**Selection of Students:** During the first three weeks of the fall semester, senior biology and society majors are considered for entry into the honors program by the Honors Program Committee. Applications for the honors program are available at the biology and society office, 275 Clark Hall. To qualify for the honors program, students must explain how the honors work will fit into their overall program, must have an overall Cornell cumulative grade-point average of at least 3.00

and at least a 3.30 cumulative grade-point average in all courses used to meet the major requirements. Students in the College of Agriculture and Life Sciences must also meet the requirements of that college and be selected by one of the existing college honors committees.

If, after admission to the honors program, a student fails to maintain a high scholastic average, or if for any other reason(s) he or she is considered unsuited for honors work, the student reverts to candidacy for the regular bachelor's degree. The student who does not continue in the honors program receives credit for any work passed in the program but is not eligible for a degree with honors.

**Project Requirements:** The satisfactory completion of a special project and the writing and oral defense of an honors thesis are required. The project must include substantial research, and the completed work should be of wider scope and higher quality than the work normally required for an advanced course.

Initiative for formulation of ideas, developing the proposal, carrying out the study, and preparation of a suitable thesis lies with the student. Honors projects will be under the direction of two advisers. Candidates must first find a biology and society faculty member willing to serve as the adviser and, together with the adviser, find a second adviser among the faculty at large. The purpose of the second adviser is to guarantee expertise in the subject matter covered by the thesis. Students in the College of Agriculture and Life Sciences must select this adviser from the area in which their thesis will be reviewed.

Students must enroll in Biology and Society 499 for one or both terms of their senior year after consultation with the biology and society thesis adviser. They take from 3 to 5 credits per term with up to a maximum of 8 credits in Biology and Society 499. Students are encouraged to enroll for both terms to give them time to develop a project properly for the thesis. If registering for a two-semester honors project, students must register for the total credits desired for the whole project each term (e.g., 8 credits for the fall term and 8 credits for the spring term). Students should note, however, that Biology and Society 499, because it is a special honors course, is to be taken in addition to those courses that meet the regular major requirements. Honors projects cannot be used to fulfill the senior seminar requirement.

**Honors Thesis:** Students and their advisers should meet regularly during the period of research and writing for the honors thesis. The responsibility for scheduling these meetings, and for carrying out the research agreed on, rests with the student. Advisers are expected to make themselves available for discussion at the scheduled times and to offer advice on the plan of research, as well as provide critical and constructive comments on the written work as it is completed. They are not expected, however, to have to pursue students either to arrange meetings or to ensure that the research and writing are being done on schedule.

There is no prescribed length for a thesis, since different topics may require longer or shorter treatment, but it should normally be no longer than seventy double-spaced, typed pages. When a thesis has been completed in a form satisfactory for purposes of evaluation, the candidate must meet with the thesis advisers and one member of the Honors Program Committee and formally defend the thesis. This should be no later than the last day of classes. Any student would be well advised, however, to provide reviewers with a polished draft at least four weeks prior to the last day of classes and defend his or her thesis well in advance of the end of classes to allow time for revisions. A public presentation of the honors work to faculty and students will be scheduled at the end of the student's last semester.

**Evaluation and Recommendation:** Two copies of the completed and defended thesis (suitably bound in a plastic or hard-backed cover), together with the advisers' recommendations, must be submitted to the Honors Program Committee by the first day of study period of the student's final term.

Following the formal defense of the thesis, the thesis advisers will each submit to the Honors Program Committee a recommendation that includes (1) an evaluation of the honors work and the thesis, (2) an evaluation of the student's academic record in the biology and society major, and (3) a recommendation for or against awarding honors. (For College of Arts and Sciences students, a justification for the level of honors proposed must be included.)

Copies of the thesis and recommendations will be circulated to the Honors Program Committee. As the committee may have little knowledge of the subject area of the thesis, letters of recommendation should be carefully prepared to help the committee ensure consistency in the honors program. Unless there is serious disagreement, the recommendation of the advisers should stand. If there is disagreement, the Honors Program Committee will make the decision after consultation with the interested parties.

### Freshman Writing Seminars

**103 In the Company of Animals**  
Spring. 3 credits.  
A. Boehm.

**[104 Ecosystems and Ego Systems]**  
Spring. 3 credits.  
M. Gilliland.]

**108 Living on the Land**  
Fall. 3 credits.  
A. Boehm.

**109 Women and Nature (also English 105.5)**  
Fall. 3 credits.  
M. Perks.

**[113 Writing as a Naturalist (also English 113)]**  
Spring. 3 credits.  
M. Gilliland.]

**[115 The American Way: Addiction and Consumption]**  
Spring. 3 credits.  
M. Gilliland.]

For up-to-date information consult the John S. Knight Writing Program brochure.

### Foundation Courses

A. Ethics (select one)

**205 Ethics and Health Care (also Philosophy 245 and Biological Sciences 205)**

Fall. 4 credits. Limited to 70 students. Registered students not attending the first week will be dropped from the course. Open to sophomores, juniors, and seniors; permission of instructor required for graduate students.

Lecs, T R 10:10–11:25, disc, 1 hour each week to be arranged. M. Wachsberg. Critical *philosophical* analysis of the conceptual frameworks in which ethical problems associated with health care can be formulated and solutions evaluated. General topics (with sample issues in parentheses) include knowledge in ethics (ethical skepticism, ethical relativism); proper social allocation of resources for, and within, medicine (entitlement to health care, access to scarce medical resources, cost-benefit analysis); the proper account of basic concepts such as illness, death, autonomy, and personhood (abortion, euthanasia, procreative technologies); and the professional-patient relationship (informed consent, confidentiality, medical paternalism). *Note:* A more detailed description of this course is available in the biology and society office, 275 Clark Hall.

**206 Ethics and the Environment (also Philosophy 246 and Biological Sciences 206)**

Spring. 4 credits. Open to all undergraduates; permission of instructor required for graduate students.

Lecs, T R 10:10–11:25, disc, 1 hour each week to be arranged. M. Wachsberg. Critical *philosophical* analysis of the conceptual frameworks in which policies affecting the environment are formulated and judged. An introductory section of the course discusses the nature of ethics and the possibility of knowledge in ethics. The first major substantive component of the course deals with the nature and extent of individual and social obligations to spatially distant people, future generations, nonhuman animals, and nonsentient things (e.g., the ecosystem). The second major component of the course deals with the appropriate analysis of the origin of environmental problems and the range of options for their solution. Topics include individual vs. collective goods, cost benefit analysis, and coordination problems. *Note:* A more detailed description of this course is available in the biology and society office, 275 Clark Hall.

B. History or Philosophy (select one)

**[288 History of Biology (also History 288 and Biological Sciences 202)]**

Spring. 3 credits. Prerequisite: one year of introductory biology. S-U grade optional. Not offered 1990–91.

Lecs, T R 10:10–11:25. W. B. Provine. An examination of the history of biology, emphasizing the interaction of biology and culture. Original writings of biologists constitute the bulk of reading assignments. This course covers the period from classical antiquity to the present, but primary emphasis is on twentieth-century biology.]

**History 282 Science in Western Civilization**

Spring. 3 credits.  
P. Dear.

**History 287 Evolution (also Biological Sciences 207)**

Fall. 3 credits. (May not be taken for credit after Biological Sciences 378, Evolutionary Biology.)  
W. B. Provine.

**Philosophy 381 Philosophy of Science: Knowledge and Objectivity**

Fall. 4 credits.  
R. Boyd.

**[Philosophy 389 Philosophy of Science: Evidence and Explanation]**

Spring. 4 credits.  
R. Miller.]

C. Biochemistry (select one)

**Biological Sciences 231 General Biochemistry**

Fall. 3 credits.  
J. M. Griffiths.

**Biological Sciences 330 Principles of Biochemistry, Individual Instruction**

Fall and spring. 4 credits.  
M. Ferger.

**Biological Sciences 331 Principles of Biochemistry, Lectures**

Fall. 4 credits. (2 credits if taken after Biological Sciences 231)  
J. K. Moffat.

D. Ecology

**Biological Sciences 261 Ecology and the Environment**

Fall. 4 credits.  
R. Root and T. Dawson.

E. Genetics (select one)

**Biological Sciences 281 Genetics**

Fall, spring, and summer. 5 credits.  
R. S. MacIntyre and M. L. Goldberg.

**Biological Sciences 282 Human Genetics**

Spring. 3 credits. (2 credits if taken after Biological Sciences 281)  
R. Calvo.

**[Plant Breeding 225 Plant Genetics]**

Spring. 4 credits.  
M. A. Mutschler.]

F. Evolutionary Biology

**Biological Sciences 378 Evolutionary Biology**

Spring. 4 credits. (2 credits if taken after History 287/Biological Sciences 207.)  
R. G. Harrison.

G. Statistics (select one)

**Agricultural Economics 310 Introductory Statistics**

Fall and spring. 4 credits.  
C. VanEs.

**Economics 319 Introduction to Statistics and Probability**

Fall. 4 credits.  
J. Park.

**Education 353 Introduction to Educational Statistics**

Spring. 3 credits.  
J. Millman.

**Industrial and Labor Relations 210 Statistics: Statistical Reasoning**

Fall and spring. 4 credits.  
Staff.

**Mathematics 372 Elementary Statistics**  
Fall. 4 credits.  
Staff.

**Operations Research and Industrial Engineering 370**  
Fall. 4 credits.  
Staff.

**Psychology 350 Statistics and Research Design**  
Fall. 4 credits.  
T. Gilovich.

**Sociology 301 Evaluating Statistical Evidence**  
Fall. 4 credits.  
R. Breiger.

**Statistics 200 Statistics and the World We Live In**  
Spring. 3 credits.  
Staff.

**Statistics 215 Introduction to Statistical Methods**  
Fall. 3 credits.  
Staff.

**Statistics 601 Statistical Methods I**  
Fall. 4 credits.  
Staff.

### Core Courses

**301 Biology and Society: The Social Construction of Life (also Biological Sciences 301)**

Fall. 4 credits. Prerequisite: one year of introductory biology. Students taking 301 as a core course must take a humanities course as part of their theme requirement.

Sem and disc, M W 2:30–4:25. P. Taylor. Controversial issues, past and present, in the life sciences and tools for analysis of the social, historical, and conceptual underpinnings of these issues. Topics include evolution and natural selection, heredity and genetic determinism, biotechnology and reproductive interventions, ecology and environmental change. Analytic themes include bias, metaphor, historical semantics, styles of explanation, determinism, causality, interest, social construction, and mapping. Through discussions and writing assignments, students will develop analytic skills and their own responses to current issues.

**Philosophy 286 Science and Human Nature**  
Spring. 4 credits.

Lecs, M W F 11:15, disc, to be announced. R. Boyd.

An examination of attempts in the biological and social sciences to offer scientific theories of human nature and human potential and to apply such theories to explain important social and psychological phenomena. Topics vary, and may include issues in psychology, such as behaviorism, Freudianism, and artificial intelligence, or issues in the foundations of historical theory, such as methodological individualism and economic determinism, as well as relevant issues in the biological sciences.

### Themes

#### A. Issues - Natural Sciences

**201 Biotechnology: The "New" Biology (also Biological Sciences 201)**

Spring. 3 credits. Prerequisite: one year of introductory biology. Not intended for students planning to enroll in BioSci 281, 330, or 331.

Sem and disc hours to be announced.

J. Fessenden MacDonald et. al.

A general introduction to the application of modern molecular biology and cell culture techniques to the manipulation of genetic engineering of animals, plants, and microorganisms. Information on recombinant DNA technology, monoclonal antibodies, plant and/or animal cell culture, and embryo manipulation methods will be presented. Commercial applications to health, forensics, environment, agriculture, and food as well as the economic, social policy, regulatory, ethical, and legal issues that surround biotechnology will be discussed. The course will be taught in four modules and the topics will vary from year to year. The topics of spring 1991 will be Gene Probes as Diagnostics and Molecular Fingerprints, Immunology and Monoclonal Antibodies, Reproductive Biotechnology, and Genetically Engineered Plants in Agriculture.

**[232 Recombinant DNA Technology and Its Applications (also Biological Sciences 232)]**

Spring. 3 credits. Disc limited to 20 students. Prerequisite: one year of introductory biology. There is a possible fee for course reading material.

Lecs and discs, M W F 11:15. J. Calvo, J. Fessenden MacDonald, F. H. Buttel.

An introduction to molecular approaches to biology. Basic concepts underlying recombinant DNA technology together with strategies for cloning genes are discussed. Much of the course deals with applications of recombinant DNA technology to basic research and to biotechnology. Applications to be discussed include screening for genetic diseases, plant improvement, and production of insulin, interferon, blood-clotting factors, growth hormones, vaccines, and feedstock chemicals. Scientific, historical, regulatory, social, and ethical issues form the basis of the discussions. Recommended especially for sophomores desiring a firm background in recombinant DNA technology in preparation for taking genetics and biochemistry. Also appropriate for an intelligent layperson who wants to understand some new research discoveries and applications stemming from them.]

**347 Human Growth and Development: Biological and Social Psychological Considerations (also Human Development and Family Studies 347 and Nutritional Sciences 347)**

Spring. 3 credits. Prerequisites: Biological Sciences 101 or 109 or equivalent, and Human Development and Family Studies 115 or Psychology 101. Offered alternate years.

Lecs M W F 1:25–2:15. J. Haas and S. Robertson.

A review of major patterns of physical growth from the fetal period through adolescence, with consideration of biological and socio-environmental determinants of growth as well as physical and psychological consequences of variations in growth patterns. An examination of normal patterns of growth is followed by an analysis of major sources of variations in growth (normal and atypical).

**469 Food, Agriculture, and Society (also Biological Sciences 469)**

Spring. 3 credits. Prerequisite: an introductory ecology course or permission of instructor. There is a possible fee for course reading material.

Lecs, T R 1:25–2:40 plus disc to be arranged. A. G. Power.

A multidisciplinary course that deals with the social and environmental impact of food production in the United States and developing countries. Agroecosystems of various kinds are analyzed from biological, economic, and social perspectives. The impacts of traditional, conventional, and alternative agricultural technologies are critically examined in the context of developed and developing economies. Specific topics include pest management, soil conservation, farm labor, land reform, biotechnology, and international food policy.

**Biological Sciences 246 Plants and Civilization**

Spring. 3 credits.

D. Bates.

**Biological Sciences 275 Human Biology and Evolution (also Anthropology 275)**

Fall. 4 credits.

J. Haas and K. Kennedy.

**Natural Resources 201 Environmental Conservation**

Spring. 3 credits.

T. Fahey.

**Nutritional Sciences 361 Biochemistry and Human Behavior (also Psychology 361)**

Fall. 3 credits.

B. Strupp.

**Nutritional Sciences 650 Public Health Nutrition**

Spring. 3 credits.

D. Roe.

#### B. Issues - Social Sciences

**300 Investigative Research on the Social Impact of Science**

Spring. 4 credits. Prerequisite: one year of science.

Sem and disc, M W 2:30–4:25. P. Taylor. Students choose a current issue in the social impact of biological or physical sciences and work through the steps of investigation from issue definition to spoken presentations and proposals for action. In a workshop setting, students comment on and learn from each other's projects and discuss case studies and articles, with occasional guest speakers and films.

**[407 Law, Science, and Public Values (also Government 407)]**

Spring. 4 credits.

Lec, M 2:30-4:30; disc, W 1:25 or 3:35. S. Jasanoff.

This course explores the varied interactions between science and the legal process that have developed in recent years as a result of attempts to bring greater public accountability to the use of science and technology. It examines the activities of both legislatures and courts in controlling science and analyzes the values underlying these initiatives. Three major types of science-law interactions form the focus of the course: regulation of new technologies, judicial review of risk-management decisions, and legal control of professional standards in science and technology. Specific topics include the regulation of toxic chemicals and nuclear power, controversies about biotechnology, reproductive technologies and biomedical research, and science fraud.]

**Biological Sciences 673 Human Evolution: Concepts, History, and Theory (also Anthropology 673)**

Fall. 3 credits.

K. Kennedy.

**City and Regional Planning 480 Environmental Politics**

Spring. 3 credits.

R. Booth.

**City and Regional Planning 551 Environmental Law**

Fall. 3 credits.

R. Booth.

**[City and Regional Planning 656 Land Resources Protection Law]**

Fall. 3 credits.

R. Booth.]

**[Consumer Economics and Housing 450 Economics of Health, Health-care Expenditures, and Health Policy]**

Fall. 3 credits.]

**History 233 Agriculture, Science, and Society: From Squanto to Biotechnology**

Fall. 4 credits.

M. Rossiter.

**[Human Development and Family Studies 258 The Historical Development of Women as Professionals, 1800 to the Present (also Women's Studies 238)]**

Spring. 3 credits.

J. Brumberg.]

**[Human Development and Family Studies 372 Typical and Atypical Intellectual Development]**

Spring. 4 credits.

S. Ceci.]

**Human Development and Family Studies 488 Development in Context (also Psychology 488)**

Spring. 4 credits.

U. Bronfenbrenner.

**Human Service Studies 315 Human Sexuality**

Spring. 3 credits.

A. Parrot.

**[Human Service Studies 325 Health Care Services and the Consumer]**

Fall. 3 credits.

A. Parrot.]

**[Human Service Studies 330 Ecology and Epidemiology of Health]**

Fall. 3 credits.

A. Parrot.]

**Human Service Studies 634 Health Care Organization—Providers and Reimbursement**

Fall. 3 credits.

R. Buchanan.

**Human Service Studies 688 Alternative Health and Social Services Delivery Systems: Long-Term Care and the Aged**

Spring. 3 credits.

R. Battistella.

**Natural Resources 400 International Environmental Issues**

Fall. 4 credits.

R. McNeil.

**[Nutritional Sciences 325 Sociocultural Aspects of Food and Nutrition]**

Fall. 3 credits.

D. Sanjur.]

**Nutritional Sciences 445 Community Nutrition and Health**

Spring. 3 credits.

A. Gillespie.

**Nutritional Sciences 457 National and International Food Economics**

Spring. 3 credits.

E. Thorbecke.

**Psychology 326 Evolution of Human Behavior**

Fall. 4 credits.

R. Johnson.

**Rural Sociology 201 Population Dynamics (also Sociology 205)**

Spring. 3 credits.

J. M. Stycos.

**Rural Sociology 205 Rural Sociology and International Development**

Spring. 3 credits.

P. McMichael.

**Rural Sociology 324 Environment and Society**

Fall. 3 credits.

F. Buttel.

**Rural Sociology 490 Society and Survival**

Fall. 3 credits.

D. Gurak.

C. Issues - Humanities

**[322 Medicine and Civilization]**

Spring. 4 credits. Offered alternate years. Not offered 1990-91.

Lecs T R 1:25-2:40. S. Gilman.

What is sickness? What is health? Who is the physician? Is a physical illness different from mental illness? Where is medicine practiced? Is being a patient or a doctor different from culture to culture and from age to age? This course will introduce the undergraduate student to the historical and cultural context of medicine. Our sources will range from the texts of ancient Greek medicine to contemporary films and novels dealing with medicine. We will examine the historical and social context of mental illness as well as physical illness from the standpoint of patient, physician, and "society." The class will consist of lecture and discussion. All of the primary readings are available in English.]

**Natural Resources 407 Religion, Ethics, and the Environment**

Spring. 3 credits.

R. Baer.

**Philosophy 241 Ethics**

Spring. 4 credits.

T. H. Irwin.

D. Senior Seminars

**[401 The History of Biology (also History 447)]**

Fall. 4 credits. Limited to 20 students. A Common Learning course. Not offered 1990-91.

Sec, T 2:30-4:30. W. Provine.]

**[402 The History of Biology (also History 448)]**

Spring. 4 credits. Not offered 1990-91.

Sec, T 2:30-4:30. W. Provine.]

**[404 Human Fertility in Developing Nations (also Rural Sociology 408)]**

Fall. 3 credits. Prerequisite: a population course or permission of instructor. Offered alternate years.

Lecs, R 3-5:30. J. M. Stycos.

A review of the major literature dealing with the social causation of variation in human fertility. Emphasis will be on international comparisons and on the methodology of field research.]

**[406 Biotechnology and Law]**

Fall. 4 credits. Limited to 20 students.

Recommended: a course in genetics or rDNA, a course in American government or law, or permission of instructor. Fee for course reading materials.

Lec, R 2:30-4:25. S. Jasanoff.

Biotechnology, with its myriad applications in areas such as medicine and agriculture, is developing more rapidly than the social institutions that are capable of controlling it. This course explores the use and potential abuse of biotechnology in areas such as genetic screening and counseling, reproductive technologies, intentional release of genetically engineered organisms, patents, and ownership of human tissue. Particular attention will be given to evolving legal and management strategies for regulating the applications of biotechnology. Readings are from science, medicine, law, and public policy. A research paper is required.]

**414 Population Policies (also Rural Sociology 418)**

Fall. 3 credits. Prerequisite: a population course or permission of instructor. Offered alternate years.

Lecs, T R 2:30-3:45. J. M. Stycos.

The ways in which societies try to affect demographic trends. Special focus is on government policies and programs to influence fertility.

**415 The Politics of Technical Decisions (also City and Regional Planning 541, Government 628)**

Spring. 4 credits.

Lecs, hours to be announced.

P. Edwards.

Political aspects of decision-making in technical areas. Drawing from recent risk disputes, we will examine the origins and characteristics of "technical politics," the role of experts in government, and the problem of expertise in a democratic system.



**426 Medicine and the Law**

Fall. 4 credits. Letter grades only.

Lecs, T 2:30-4:25. Limited to 16 students.  
L. Palmer.

The role of law in modern medicine (and the related biomedical sciences) will be examined from the perspective of the social functions of law and medicine. A number of policy and ethical issues will be considered, including the role of hospitals and other health organizations in doctor-patient interactions, the social aspects of physician-patient interactions, reproductive technologies, the effect of medical malpractice on health-care delivery, legal issues in the care of the newborn and health-care decisions for incompetents and terminally ill patients.

**428 Medical Service Issues in Health Administration (also Human Service Studies 628)**

Spring. 3 credits.

Sec, M W 2:15-3:30. V. Utermohlen.

A survey of the issues that affect interactions between the health-care consumer and the health-care team, including disease processes (how disease occurs and progresses), the health-care team and illness, third-party payment and illness, and resource allocation.

**434 Biotechnology: Science, Policy and Values (also Biological Sciences 434)**

Spring. 3 credits. Fee for photocopied materials.

Sem, W 1:25-4:25.

J. Fessenden MacDonald.

Topic for 1991: environment, agriculture, and food biotechnology. Issues raised by the introduction of new biotechnology products and procedures to medicine, food and agriculture, environment, and the legal system will be analyzed. There will be an examination of the scientific, political, legal, economic, social, and ethical implications. Cases studied will vary each term. Background is provided on the molecular biology and applied science aspects of the biotechnology under consideration. Readings from various disciplines, including scientific papers, government reports, and industrial and legal reports, will provide background for class discussions. A research paper and oral presentations are required. Topics for 1992: rDNA drugs and diagnostics, DNA fingerprinting, and gene therapy.

**442 Social and Political Studies of Science (also City and Regional Planning 442)**

Fall. 3 or 4 credits.

Lecs, hours to be announced. T. Pinch.

A view of science less as an autonomous activity than as a social and political institution. We will discuss such issues as secrecy in science, ethical and value disputes, and the limits to scientific inquiry in the context of the changing relationships between science and the public.

**451 AIDS and Society**

Fall. 3 credits. Limited to 20 students who have been approved by Professor A. van Tienhoven, 102 Rice Hall. A Common Learning course.

W 2:30-4:30. Optional 1 hr. discussion, M 2:30. A. van Tienhoven and others.

Discussions of the impact of acquired immune deficiency syndrome (AIDS) on society will consist of faculty seminars on the biology of the virus, the epidemiology of the disease, the legal aspects of controlling the spread of the disease, and the impact of the disease on the

performing arts, especially theater. Students will have the opportunity to initiate and carry out (a) class project(s).

**460 Social Analysis of Ecological Change (also Rural Sociology 660)**

Fall. 3 credits. Limited to 20 students. Seniors must have permission of instructor. Offered alternate years.

Sem, M 7:30-10:30 p.m. P. Taylor.

Scientific studies of ecological and social processes, together with the analysis of those studies and their interpretation by historians, sociologists, and anthropologists. Topics include cybernetics, systems ecology, the tragedy of the commons, the *Limits to Growth*, ecological degradation, political ecology, global models, conservation biology, and sustainable development.

**461 Environmental Policy (also Biological Sciences 661 and Agriculture and Life Sciences 661)**

Fall and spring. 6 credits. Prerequisite: permission of instructor. This is a two-semester course.

Sec, R 2:30-4:30. D. Pimentel.

This course uses an interdisciplinary approach to focus on complex environmental and energy problems. Ten to twelve students, representing several disciplines, investigate significant environmental problems. The research team spends two semesters preparing a scientific report for publication in *Science* or *BioScience*.

**Human Service Studies 625 Consumer and Ethical Perspectives**

Fall. 3 credits. If using this course as a senior seminar, Biology and Society majors must inform instructor and write a major paper for a fourth credit. Enrollment is limited to 30 (10 undergraduates). Permission of instructor is required.

M W 2-4:15 (until 10/31). A. Parrot.

**Other Courses****375 Independent Study**Fall or spring. 1-4 credits. Prerequisite: must be a Biology and Society major and have written permission of faculty supervisor.  
Staff.

Projects under the direction of a Biology and Society faculty member are encouraged as part of the program of study within the student's concentration area. Applications for research projects are accepted by individual faculty members. Students may enroll for 1-4 credits in Biology and Society 375 (Independent Study) with written permission of the faculty supervisor and may elect either the letter grade or the S-U option. Students may elect to do an independent study project as an alternative to, or in advance of, an honors project. Applications and information on faculty research, scholarly activities, and undergraduate opportunities are available in the Biology and Society office, 275 Clark Hall. Independent study credits may not be used in completion of the major requirements.

**400 Undergraduate Seminar**

Fall or spring. Variable credit. May be repeated for credit.

Staff.

From time to time different seminars on topics of interest to undergraduates are offered. Topics and instructors are listed in the biology and society supplement issued at the beginning of each semester.

**499 Honors Project**

Fall or spring; two-semester projects are acceptable. 3-5 credits each term with a maximum of 8 credits for the entire project. Open only to Biology and Society students in their senior year.

Staff.

Students enrolled in Biology and Society 499 will receive a letter grade at the end of their final term, whether or not they complete a thesis and whether or not they are recommended for honors. Students enrolled for the whole year in 499 may receive either a letter grade for both terms or a grade of "R" for the first term with a letter grade for both terms submitted at the end of the second term. When a student is enrolled for two terms, the student and the thesis adviser must reach a clear agreement at the outset as to which grade will be assigned for the first term and on the basis of what sort of work. Minimally an honors thesis outline and bibliography should be completed during the first term. Applications and information are available in the Biology and Society office, 275 Clark Hall.

**Cognitive Studies Program**

F. Keil (psychology), S. McConnell-Ginet (linguistics), codirectors. G. Bilardi, K. Birman, R. Constable, B. Donald, D. Huttenlocher, D. McAllester, P. Panangaden, G. Salton, A. Segré, D. Subramanian, (computer science); J. Condry, B. Koslowski, B. Lust, M. Potts, G. Suci (human development and family studies); L. Babby, J. Bowers, G. Chierchia, G. N. Clements, J. Gair, W. Harbert, J. Huang, J. Kingston, A. Landman, S. McConnell-Ginet, C. Rosen, C. Shih, M. Suñer, L. Waugh, J. Whitman (linguistics); A. Nerode, R. Platek, R. Shore (mathematics); A. Appiah, R. Boyd, C. Ginet, H. Hodes, S. Shoemaker (philosophy); J. Cutting, B. Finlay, E. Gibson, B. Halpern, F. Keil, C. Krumhansl, H. Kurtzman, H. Levin, E. Spelke (psychology)

Cognitive studies is comprised of a number of disciplines that are linked by a major concern with such fundamental capacities of the mind as perception, memory, reasoning, language, and motor control. In the College of Arts and Sciences these disciplines are represented in the departments of Computer Science, Linguistics, Mathematics, Philosophy, and Psychology. Elsewhere in the university they are represented in the Department of Human Development and Family Studies (College of Human Ecology), the Section of Neurobiology and Behavior (Division of Biological Sciences), and the Department of Education (College of Agriculture and Life Sciences).

The issues addressed in cognitive studies arise at several levels. At the broadest level are problems of characterizing such basic notions as "mind," "knowledge," "information," and "meaning." At a more specific level are questions regarding the abstract operating principles of individual components of the mind, such as the components underlying visual perception, language ability, and understanding of concepts. These principles concern the organization and behavior of the components and also how the components develop and change. And at the most specific level are questions about the properties of the elementary computational structures and processes that constitute these components.

Important insights into issues of these kinds have been achieved in recent years as a result of the various cognitive studies disciplines converging in their theoretical and methodological approaches. It is this convergence, in fact, that warrants grouping the disciplines together under the single term "cognitive studies." Even greater progress can be expected in the future as a consequence of increasing cooperation among the disciplines.

### Undergraduate Concentration

Professor H. Kurtzman (psychology), director of undergraduate studies (224 Uris Hall, 255-3835).

The undergraduate concentration in cognitive studies provides a framework for the design of structured, individualized programs of study in this growing interdisciplinary field. Such programs of study are intended to serve as complements to intensive course work in a single discipline as represented in an individual department. It is considered crucial that students gain a strong background in an individual department, independent of their work in the concentration. This background provides both a foundation and a focus for the concentration work.

In light of the importance of a strong background in an individual department, it is required that a student seeking admission to the concentration have completed or plan to complete three courses in one department from among the list of courses below. (Such a student will typically be a major in the department, but being a major is not necessary. The Section of Neurobiology and Behavior counts as a department here.) These three courses are, however, the only requirement for admission. To enter the concentration formally, the student should consult with the concentration director, who will assign the student a concentration adviser (from among the faculty listed above) who has expertise in the student's main areas of interest.

The concentration requires that the student take five courses from departments other than the one from which the student takes the three courses needed for admission to the concentration. These five courses may not all be taken from a single department. The student must gain approval for the selection of five courses from the concentration adviser. The five courses will generally be chosen from among the list below, but other courses (including independent study) are permissible in individual cases.

In addition to assisting in and approving the student's selection of courses, the concentration adviser serves as a general source of information about the field of cognitive studies, relevant resources around the university, and job and graduate school opportunities.

### Graduate Minor

For information, consult the program office (225 Uris Hall, 255-6431).

### Courses

#### Computer Science

##### 172 An Introduction to Artificial Intelligence

Spring. 4 credits.

##### 211 Computers and Programming

Fall or spring. 3 credits.

##### 212 Modes of Algorithmic Expression

Fall. 4 credits.

##### 280 Discrete Structures

Fall or spring. 4 credits.

##### 381 (or 481) Introduction to Theory of Computing

Fall. 4 credits.

##### 410 Data Structures

Fall or spring. 4 credits.

##### 411 Programming Languages and Logics

Spring. 4 credits.

##### 472 Introduction to Artificial Intelligence

Fall. 3 credits.

##### 473 Practicum in Artificial Intelligence

Spring. 2 credits.

##### 482 (382) Introduction to Analysis of Algorithms

Spring. 4 credits.

##### 486 Applied Logic (also Mathematics 486)

Spring. 4 credits.

##### 664 Machine Vision

Spring. 4 credits.

#### Education (College of Agriculture and Life Sciences)

##### 210 Introduction to Applied Psychology: Learning and Memory

Fall. 3 credits.

J. A. Dunn.

#### Human Development and Family Studies (College of Human Ecology)

##### 333 Cognitive Processes in Development

Fall. 3 credits.

Staff.

##### 431 Learning in Children

Fall. 3 credits.

M. Potts.

##### 432 Cognitive Development and Education

Spring. 3 credits.

M. Potts.

##### 434 The Growth of the Mind: A View from Piaget's Theory

Spring. 4 credits.

B. Lust.

##### 436 Language Development (also Psychology 436 and Linguistics 436)

Spring. 4 credits.

B. Lust.

##### 438 Thinking and Reasoning

Fall. 3 credits.

B. Koslowski.

### Linguistics

##### 101-102 Theory and Practice of Linguistics

Fall and spring. 4 credits each term.  
Staff.

##### 264 Language, Mind, and Brain

Fall. 4 credits.

J. Bowers.

##### 301-302 Phonology I, II

Fall and spring. 4 credits each term.

G. N. Clements.

##### 303-304 Syntax I, II

Fall and spring. 4 credits each term.

Staff.

##### 309-310 Morphology I, II

Fall and spring. 4 credits each term.

Staff.

##### 316 Introduction to Mathematical Linguistics

Spring. 4 credits.

F. Landman.

##### 319-320 Phonetics I, II

Fall and spring. 3 credits each term.

J. Kingston.

##### 325 Pragmatics

Fall. 4 credits.

S. McConnell-Ginet.

##### 370 Language and Cognition (also Psychology 370)

Spring. 4 credits.

J. Bowers, H. Kurtzman.

##### 400 Semiotics and Language

Spring. 4 credits.

L. Waugh.

##### 401 Language Typology

Fall. 4 credits.

J. Whitman.

##### 412 Process and Knowledge in Speech Perception and Word Recognition

Spring. 4 credits.

J. Kingston.

##### 418 Nonlinear Phonology

Spring. 4 credits.

J. Kingston.

##### 420 Fundamentals of Speech Acoustics

Spring. 4 credits.

J. Kingston.

##### 421-422 Semantics I, II

Fall and spring. 4 credits each term.

F. Landman.

##### 436 Language Development (also Psychology 436 and HDFS 436)

Spring. 4 credits.

B. Lust.

### Mathematics

##### 481 Mathematical Logic

Spring. 4 credits.

##### 483 Intensional Logics and Alternatives to Classical Logics (also Philosophy 436)

Spring. 4 credits.

##### 486 Applied Logic (also Computer Science 486)

Fall. 4 credits.

##### 487 Applied Logic II

Spring. 4 credits.

**Neurobiology and Behavior (Division of Biological Sciences)****221 Neurobiology and Behavior I: Introduction to Behavior**

Fall. 3 or 4 credits.  
S. Emlen and staff.

**222 Neurobiology and Behavior II: Introduction to Neurobiology**

Spring. 3 or 4 credits.  
O. Hamill.

**326 The Visual System**

Spring. 4 credits.  
H. Howland.

**396 Introduction to Sensory Systems (also Psychology 396)**

Spring. 3 or 4 credits.  
B. Halpern.

**424 Neuroethology**

Fall. 3 credits.  
Staff.

**492 Sensory Function (also Psychology 492)**

Spring. 4 credits.  
H. Howland, B. Halpern.

**Philosophy****231 Introduction to Formal Logic**

Fall or spring. 4 credits.  
C. Ginet.

**261 Knowledge and Reality**

Fall. 4 credits.

**262 Philosophy of Mind**

Spring. 4 credits.  
S. Shoemaker.

**318 Twentieth-Century Philosophy**

Spring. 4 credits.  
C. Ginet.

**331 Formal Logic**

Fall. 4 credits.  
H. Hodes.

**332 Philosophy of Language**

Spring. 4 credits.  
M. Crimmins.

**361 Metaphysics and Epistemology**

Fall. 4 credits.

**381 Philosophy of Science: Knowledge and Objectivity**

Fall. 4 credits.  
R. Boyd.

**382 Philosophy and Psychology**

4 credits.

**383 Philosophy of Choice and Decision**

Spring. 4 credits.  
M. Crimmins.

**389 Philosophy of Science: Evidence and Explanation**

4 credits.

**431 Deductive Logic**

4 credits.

**433 Philosophy of Logic**

4 credits.

**436 Intensional Logic**

Spring. 4 credits.

**437 Problems in the Philosophy of Language**

4 credits.

**461 Metaphysics**

Spring. 4 credits.  
S. Shoemaker.

**Psychology****205 Perception**

Spring. 3 credits.  
J. Cutting.

**209 Development**

Spring. 4 credits.  
Staff.

**214 Knowledge and Reasoning**

Spring. 3 credits.  
C. Krumhansl.

**215 Psycholinguistics**

Fall. 3 or 4 credits.  
H. Kurtzman.

**305 Visual Perception**

Fall. 4 credits.  
J. Cutting.

**308 Perceptual Learning**

Fall. 3 credits.  
Staff.

**309 Development of Perception and Representation**

Fall. 3 credits.  
E. Spelke.

**313 Perceptual and Cognitive Processes**

Fall. 4 credits.  
Staff.

**314 The Social Psychology of Language**

Spring. 4 credits.  
H. Levin.

**316 Auditory Perception**

Spring. 3 or 4 credits.  
Staff.

**332 Biopsychology of Learning and Memory**

Spring. 3 credits.  
T. DeVogd.

**370 Language and Cognition (also Linguistics 370)**

Spring. 4 credits.  
J. Bowers, H. Kurtzman.

**396 Introduction to Sensory Systems (also Biological Sciences 396)**

Spring. 3 or 4 credits.  
B. Halpern.

**412 Human Experimental Psychology Laboratory**

Spring. 4 credits.  
Staff.

**415 Concepts, Categories, and Word Meanings**

Fall. 4 credits.  
F. Keil.

**416 Psychology of Language**

Spring. 4 credits.  
H. Kurtzman.

**417 The Origins of Thought and Knowledge**

Spring. 4 credits.  
F. Keil.

**418 Psychology of Music**

Fall. 3 or 4 credits.  
C. Krumhansl.

**425 Brain and Behavior**

Fall. 3 or 4 credits.  
B. Finlay.

**436 Language Development (also Linguistics 436 and HDFS 436)**

Spring. 4 credits.  
B. Lust.

**465 Mathematical Psychology**

Spring. 4 credits.

**490 History and Systems of Psychology**

Fall. 4 credits.  
H. Levin.

**492 Sensory Function (also Biological Sciences 492)**

Spring. 4 credits.  
H. Howland, B. Halpern.

**Graduate Courses and Seminars**

The following courses and seminars are generally for graduate students only. However, some may be appropriate for advanced undergraduates. The director of the concentration must approve an undergraduate's use of any of these for satisfying the concentration requirements.

**Cog St 773 (also Philosophy 773 and Psychology 773) Proseminar in Cognitive Studies I**

Fall. 2 credits.

**Cog St 774 (also Computer Science 774 and Linguistics 774) Proseminar in Cognitive Studies II**

Spring. 2 credits.

**Cog St 600/700 Graduate Seminars****CS 600/700 Graduate Seminars****HDFS 600/700 Graduate Seminars****Ling 600/700 Graduate Seminars****Math 581 Logic****Math 655 Mathematical Foundations of Computer Modeling and Simulation****Math 684 Recursion Theory****Math 688 Automated Theorem Proving****Phil 700 Graduate Seminars****Psych 500-700 Graduate Seminars****College Scholar Program**

Dean Lynne Abel, director, 55 Goldwin Smith Hall, 255-3386.

The College Scholar program is described in the introductory section, p. 130.

**397 Independent Study**

Fall or spring. 1-4 credits. Prerequisite: permission of program office.

**499 Honors Research**

Fall or spring. 1-8 credits; a maximum of 8 credits may be earned for honors research. Prerequisite: permission of program director. Each participant must submit a brief proposal approved by the honors committee.

## East Asia Program

140 Uris Hall

K. W. Brazell, director; S. Akiba, C. D. A. Bailey, R. Barker, M. C. Chou, S. G. Cochran, J. Cody, B. de Bary, E. M. Gunn, C. T. J. Huang, Q. Jia, J. V. Koschmann, J. M. (Swanberg) Law, L. C. Lee, T. P. Lyons, D. R. McCann, J. R. McRae, T. L. Mei, V. Nee, T. J. Pempel, C. A. Peterson, J. R. Piggott, D. L. Poston, M. Rebick, N. Sakai, P. S. Sangren, C. L. Shih, T. Shiraishi, V. B. Shue, R. J. Smith, R. J. Sukle, J. K. Wheatley, J. Whitman, A. Yee, M. W. Young

East Asian studies at Cornell is led by thirty-five faculty members from seven colleges, who participate in a program of research and teaching on the civilizations and cultures of East Asia. Courses are offered in most of the humanities and social science disciplines, as well as in the fields of business, city and regional planning, and rural sociology. Comprehensive language courses in Mandarin, Cantonese, and Japanese are taught, in addition to the Full-year Asian Language Concentration (FALCON) in Japanese and Mandarin. Elementary and intermediate-level Korean language instruction are also offered. Undergraduates major in the Department of Asian Studies and concentrate on the language and culture of one East Asian country, while graduate students may work toward an M.A. in East Asian studies, a dual M.B.A./M.A. degree, or an M.A./Ph.D. degree in a discipline such as agricultural economics, anthropology, city and regional planning, government, history, history of art, linguistics, literature, rural sociology, or sociology. A variety of fellowships, travel grants, awards, and assistantships are available for graduate students in East Asian studies.

The formal program of study is enriched by a variety of extracurricular activities, including a Chinese language house, various film series, career workshops, art exhibits, and numerous lectures and performances related to East Asia. The Wason Collection in Olin Library is a comprehensive collection of books on East Asia in Western languages, Japanese, and Chinese. The Mary Rockwell Galleries of the Herbert F. Johnson Museum of Art have an excellent collection of East Asian art.

## Freshman Writing Seminars

For information about the requirements for freshman writing seminars and descriptions of seminar offerings, see John S. Knight Writing Program, p. 311, and consult the John S. Knight Writing Program brochure, available from college registrars in August for the fall term and in November for the spring term.

## Program in History and Philosophy of Science and Technology

The Program in History and Philosophy of Science and Technology (HPST) is an interdisciplinary program that provides a broadly based perspective on science and its place in modern society. The faculty is drawn from numerous science and humanities departments and includes specialists in philosophy, history, and communications. A considerable number of courses is offered each year at the undergraduate level, ranging from historical surveys of physical and biological sciences to the philosophy of science. The cultural and intellectual history of science and technology in particular periods and in both American and European settings, courses in

science writing, and the philosophy of quantum physics all contribute to the establishment of a richly structured field of opportunity for those undergraduates who wish to supplement their majors with an integrated yet wide-ranging series of studies that will further their understanding of a powerful social and cultural force.

## The Concentration

The undergraduate concentration in HPST is an interdisciplinary offering providing a broadly based perspective on science and its place in modern society. It grants recognition to students, regardless of college or major, who have successfully completed before graduation a sequence of courses selected from among a substantial number of offerings. Credit for the concentration is awarded for the completion of at least one course in each of four categories. The courses currently on offer for 1990-91 under each category are listed below; certain unlisted courses from previous years may also qualify.

Interested students should contact Pat Dean, Program in the History and Philosophy of Science and Technology, 425 Caldwell Hall (tel. 5-6234), from whom information on available program advisers can also be obtained.

## History of Science

- Hist. 281 or 282. Science in Western Civilization. Fall and spring. 281, Fall; 282, Spring. History 281 is not a prerequisite for 282.
- Hist. 287 (also Biological Sciences 207). Evolution. Fall.
- Hist. 288 (also Biological Sciences 202 and Biology and Society 288). History of Biology. Spring.
- Hist. 482. Origins of Modern Science. Spring.

## History of Technology and Applied Sciences

- Engr 250. Technology in Western Society. Fall.
- Engr 256. Science and Technology in America. Spring.
- EE 292. The Electrical and Electronic Revolutions. Spring.

## Philosophy of Science

- Phil. 286. Science and Human Nature. Spring.
- Phil. 381. Philosophy of Science: Knowledge and Objectivity. Fall.
- Phil. 384. Philosophy of Physics. Spring.
- Phil. 481. Problems in the Philosophy of Science. Spring.

## Social Dimensions of Science

- Comm. 352. Science Writing for the Mass Media. Fall.
- Hist. 443. Science and Culture in Austria 1872-1930. Fall.
- Hist. 487 Science, Technology, and Strategy in the Post-Napoleonic World. Spring.

Interested students should contact Pat Dean, Program in HPST, 425 Caldwell Hall (tel. 5-6234), for a full listing of courses and for information on available program advisers.

## Human Biology Program

J. Haas (nutritional sciences), director, 211 Savage Hall, 255-8001; R. Dyson-Hudson (anthropology), B. Finlay (psychology), J. Fortune (physiology/women's studies), R. Johnston (psychology), K.A.R. Kennedy (ecology and systematics/anthropology), D. Levitsky (nutritional sciences), D. McClearn (ecology and systematics), D. L. Pelletier (nutritional sciences), W. Provine (ecology and systematics/history), R. Robertshaw (physiology), S. Robertson (human development and family studies), R. Savin-Williams (human development and family studies), M. Small (anthropology)

Human biology integrates the methods and theories of many disciplines, such as biological anthropology, nutrition, neurobiology, physiology, psychology, demography, ecology, genetics, and paleontology, into a comprehensive study of biological diversity in *Homo sapiens*. A central focus of this interdisciplinary approach to the study of the human organism is an understanding of evolutionary processes that explain our biological variation through space and time. The program of study seeks to educate future biological scientists to address the concerns of a society that is becoming more demanding of the scientific community to place its specialized biological knowledge in a broad context. The human biology curriculum is of particular relevance to undergraduate students in premedical and predoctoral programs, biological anthropology, nutrition, human development, ecology and systematics, psychology, physiology, genetics, and the health-related sciences. It serves to bring together students with a common interest in humankind as defined from these diverse fields and to provide a forum for student-faculty interaction on various topics relating to human evolution and biological diversity. Human biology is not a major but a curriculum of study that provides majors in various departments with a program for selecting elective courses that deal with the biology of the human species. Students in their junior year may develop a program of study in human biology while majoring in a number of different departmental fields.

## Basic Requirements

The requirements for a program of study in human biology are designed to ensure sufficient background in physical sciences and mathematics to enable the student to pursue a wide range of interests in the fields of modern biological sciences, anthropology, and fields related to the evolution and physical diversity of the human species. Adjustments may be made in these requirements, depending upon the student's academic background and affiliation with colleges and schools within the university.

The basic requirements are one year of introductory biology (Biological Sciences 101-103 plus 102-104 or 105-106 or Biological Sciences 100 offered during the six-week Cornell Summer Session); one year of general chemistry (Chemistry 103-104 or 207-208 or 215-216); one year of college mathematics (Mathematics 111-112 or 105-106 or 111-105); one course in genetics (Biological Sciences 281 or 282); one course in biochemistry (Biological Sciences 231, 330 or 331). It is recommended that students planning graduate careers in biological anthropology, psychology, and related fields in the medical and nutritional



sciences take a course in statistics. Students should consult their faculty adviser in human biology for help in selecting appropriate courses.

Elective courses should be taken that will enable the student to acquire breadth in the subject matter of human biology outside of their departmental major. Therefore only 6 of the 15 human biology elective credits may also fulfill requirements for the major. Courses should be selected that also provide sufficient exposure to the integration of basic anatomical and physiological sciences with the behavior of individuals and groups within the context of evolutionary theory and ecology. The courses listed below are representative of the offerings in human biology and are included to assist the student in organizing a curriculum of study. They are organized into three groups that reflect the three levels of integration noted above: (1) human anatomy and physiology, (2) human behavior, and (3) human evolution and ecology. Students should choose at least one course from each of these areas of integration. It is anticipated that the student will include in a program of study at least one of the laboratory courses offered. It is expected that a student will take a minimum of 15 credits from among these courses.

There is no foreign language requirement for human biology beyond what is dictated by specific departments and colleges. The requirements for the human biology curriculum are set alongside requirements of the undergraduate majors as these are defined by different departments. Students with independent majors may design their own programs of study under the guidelines provided by their college. Although a student may indicate an interest in human biology in the freshman year and be able to obtain early guidance from a faculty adviser representing the curriculum of study, it is more usual for students to establish their course programs in the first semester of the junior year. The student may request one of the faculty advisers in his or her department who is listed as faculty in human biology to be their principal adviser, or he or she may have an adviser in the department of the major and seek the advice of a human biology faculty adviser in matters pertaining to satisfaction of the requirements. In certain cases a faculty adviser may represent both the major and the curriculum of study in human biology.

## Courses

### Human Anatomy and Physiology

**Bio S 214 The Biological Basis of Sex Differences (also Women's Studies 214)**

Spring. 3 credits.

**Bio S 274 Functional and Comparative Morphology of Vertebrates**

Spring. 4 credits.

**Bio S 311 Introductory Animal Physiology, Lectures (also Veterinary Medicine 346)**

Fall. 3 credits.

**Bio S 319 Animal Physiology Experimentation (also Veterinary Medicine 378)**

Fall. 3 credits.

**Bio S 410 Seminar in Anatomy and Physiology**

Fall or spring. 1 credit.

**Bio S 458 Mammalian Physiology**

Spring. 3 credits.

**Bio S 474 Laboratory and Field Methods in Human Biology (also Anthropology 474)**

Spring. 5 credits.

**NS 115 Ecology of Human Nutrition and Food**

Fall or spring. 3 credits.

**NS 222 Maternal and Child Nutrition**

Spring. 3 credits.

**NS 331 Physiological and Biochemical Bases of Human Nutrition**

Spring. 3 credits.

**NS 361 Biochemistry and Human Behavior (also Psychology 361)**

Fall. 3 credits.

**NS 441 Nutrition and Disease**

Fall. 4 credits.

**Psych 322 Hormones and Behavior (also Biological Sciences 322)**

Spring. 3 or 4 credits.

**Psych 425 Brain and Behavior**

Fall. 3 or 4 credits.

**Vet M 331 Medical Parasitology**

Fall. 2 credits.

### Human Behavior

**Anthr 490 Primates and Evolution**

Spring. 4 credits.

**Bio S 301 Biology and Society I: The Social Construction of Life (also Anthropology 301 and Biology and Society 301)**

Fall. 3 credits.

**Bio S 427 Animal Social Behavior**

Fall. 3 credits.

**HDFS 344 Infant Behavior and Development**

Fall. 3 credits.

**HDFS 464 Developmental Theory and Research on Homosexuality**

Fall. 4 credits.

**HDFS 645 Seminar in Infancy: Newborn Behavioral Organization**

Spring. 3 credits.

**HSS 315 Human Sexuality: A Biosocial Perspective**

Fall, spring, or summer. 3 credits.

**NS 245 Social Science Perspectives of Human Nutrition**

Fall. 3 credits.

**NS 347 Human Growth and Development: Biological and Social Psychological Considerations (also Human Development and Family Studies 347)**

Spring. 3 credits.

**NS 445 Community Nutrition and Health**

Spring. 3 credits.

**Psych 326 Evolution of Human Behavior**

Fall. 4 credits.

**Psych 425 Brain and Behavior**

Fall. 3 or 4 credits.

**R Soc 408 Human Fertility in Developing Nations (also B Soc 404)**

Fall. 4 credits.

**R Soc 438 Social Demography**

Fall. 3 credits.

**R Soc 481 Techniques of Demographic Analysis**

Spring. 3 credits.

**R Soc 490 Mortality and Morbidity**

Spring. 3 credits.

### Human Evolution and Ecology

**Anthr 101 Biological Perspectives on the Evolution of Human Kind**

Fall. 3 credits.

**Anthr 203 Early People: The Archaeological and Fossil Record (also Archaeology 203)**

Fall. 3 credits.

**Anthr 214 Humankind: The Biological Background**

Fall. 3 credits.

**Anthr 490 Primates and Evolution**

Spring. 4 credits.

**Bio S 207 Evolution**

Fall. 3 credits.

**Bio S 261 Principles of Ecology**

Fall. 4 credits.

**Bio S 272 Functional Ecology**

Spring. 4 credits.

**Bio S 275 Human Biology and Evolution (also Anthropology 275)**

Fall. 3 or 4 credits.

**Bio S 371 Human Paleontology (also Anthropology 371)**

Fall. 4 credits.

**Bio S 378 Evolutionary Biology**

Spring. 4 credits.

**Bio S 461 Population and Evolutionary Ecology**

Spring. 4 credits.

**Bio S 470 Ecological Genetics**

Spring. 4 credits.

**Bio S 471 Mammology**

Fall. 4 credits.

**Bio S 481 Population Genetics**

Spring. 4 credits.

**Bio S 482 Human Genetics and Society**

Fall. 2 credits.

**Bio S 673 Human Evolution: Concepts, History and Theory (also Anthropology 673)**

Fall. 3 credits.

**B&Soc 447 History of Biology-Evolution (also History 447)**

Fall. 4 credits.

**HSS 330 Ecology and Epidemiology of Health**

Fall. 3 credits.

**Psych 326 Evolution of Human Behavior**

Fall. 4 credits.

**R Soc 483 Techniques of Demographic Analysis**

Spring. 4 credits.

**Vet M 331 Medical Parasitology**

Fall. 2 credits.

**Vet M 664 Introduction to Epidemiology**

Spring. 3 credits.

### Independent Major Program

Dean Lynne Abel, director, 55 Goldwin Smith Hall, 255-3386.

The Independent Major Program is described in the introductory section, p. 129.

#### 351 Independent Study

Fall or spring. 1-4 credits. Prerequisite: permission of the program office.

#### 499 Honors Research

Fall or spring. 4-8 credits; a maximum of 8 credits may be earned for honors research. Prerequisite: permission of program director. Each participant must submit a brief proposal approved by the honors committee.

### Intensive English Program

E. J. Beukenkamp, director

This full-time, noncredit, nondegree program is designed to meet the requirements of foreign students who need to acquire proficiency in English to pursue university-level studies in the United States, as well as for visitors, businessmen, and others seeking competence in the language.

The intensive nature of the program leads to a command of the language in all its aspects—listening, speaking, reading, and writing—in the shortest possible time.

Integrated courses are offered both fall and spring semesters at three levels: beginning (Test of English as a Foreign Language [TOEFL] score below 370), intermediate (TOEFL score below 450), and advanced.

Students who have gained full admission to, or who already are registered in, degree-granting programs at Cornell should consult the section, Modern Languages and Linguistics, for information regarding courses in English as a second language.

The Intensive English Program is administered by the Department of Modern Languages and Linguistics, Cornell University, Morrill Hall, Ithaca, New York 14853-4701, U.S.A. Application materials and information are available directly from the program or by calling 607/ 255-4863.

### International Relations Concentration

Peter Katzenstein, faculty coordinator

Undergraduates interested in an international relations concentration should see the TA in charge, whose name is posted on Professor Katzenstein's office door (McGraw B-7).

One of the university's strongest, most diverse fields is international relations. Cornell offers dozens of courses, in many departments and several colleges, that provide a strong education in the field, including courses in government, economics, history, anthropology, rural sociology, nutrition, modern languages and literatures, international comparative labor relations, and many others too numerous to list and keep current.

The purpose of a concentration is to provide a structure for students who have a general interest in the field or who plan to specialize in careers in international law, economics, agriculture, foreign trade, international banking, government service, international organizations, or another cultural or scholarly activity. Some students will major in one of the traditional departments: history, government, economics, foreign literature, and so on. Others will design an independent major. Still

others will major in a different discipline, perhaps altogether unrelated, but would like to have a basic understanding of international problems.

For students in any of these categories, the requirements for a concentration in international relations are the following six courses or options:

- 1) Government 181, Introduction to International Relations
- 2) One appropriate 300-level government course, either in international relations or in the foreign policy of a particular nation
- \*3) Two courses in Economics, chosen from among the following offerings:
  - a) Economics 361, International Trade Theory
  - b) Economics 362, International Monetary Theory
  - c) *Either* Economics 367, Comparative Economic Systems: Soviet Union and Europe, *OR* Economics 368, Comparative Economic Systems: United States, Europe, and the Soviet Union.
  - d) Economics 371, Economic Development
  - e) Economics 372, Applied Economic Development
  - f) Economics 373, International Specialization and Economic Development
  - g) Economics 374, National and International Food Economics
- 4) History 314, History of American Foreign Policy II
- 5) Any history course dealing with a modern nation other than the United States

Under certain conditions, it may be possible to substitute other courses for those listed above.

Students are also urged as strongly as possible to acquire full proficiency in, not merely a passing acquaintance with, a modern foreign language. At least a semester of study abroad is advised.

### Center for International Studies

See Interdisciplinary Centers, Programs, and Studies, p. 18.

### Program of Jewish Studies

D. I. Owen, acting director (Near Eastern and ancient Jewish history), S. Bacharach (industrial and labor relations, sociology, Jewish thought and social theory), R. Brann (Hebrew and Judeo-Arabic literatures), W. J. Dannhauser (Jews and Germans, contemporary Jewish thought, Gershom Scholem), S. L. Gilman (Yiddish Literature, German Jewish history and literature), S. T. Katz (Jewish history and religion), G. Korman (Holocaust studies, Jewish labor history), D. S. Powers (history of Jews in Islamic lands), G. Rendsburg (biblical studies), E. Rosenberg (Jews in modern European and Anglo-American literature), N. Scharf (Hebrew language), S. Schwartz, N. Sher (jurisprudence), M. Winter (Dayan Visiting Professor)

The Program of Jewish Studies is a university-wide program housed in the College of Arts and Sciences. It was founded as an extension of the Department of Semitic Languages and Literatures (now the Department of Near Eastern Studies) in 1973 and attained status as an independent and intercollegiate program in 1976.

The program has grown out of the conviction that Judaic civilization merits its own comprehensive and thorough treatment and that proper understanding of any culture is inconceivable without adequate knowledge of the language, literature, and history of the people that created it. Accordingly, the offerings in the areas of Hebrew language and literature have been considerably expanded, and courses in ancient, medieval, and modern Jewish history have been added to the program.

It is a broadly based, interdisciplinary program, bringing together faculty from the various Cornell colleges and schools.

The Program of Jewish Studies supports teaching and research in the overall area of Judaic Studies. It is a secular, academic program, the interests of which are diverse and cross-cultural. The program recognizes its special relationship to teaching and research in classical Judaica and Herbraica which is pursued by the members of the Department of Near Eastern Studies.

Although further expansion of the program is anticipated, it presently enables students to obtain basic instruction and specialization in the fields of Semitic languages; the Hebrew Bible; the apocryphal and Tannaitic literatures; medieval and modern Hebrew literature; ancient, medieval, and modern Jewish history; and modern Jewish thought. In some of these fields students may take courses both on graduate and undergraduate levels. Faculty throughout the university provide breadth to the program by offering courses in related areas of study.

### Courses Offered

#### Elementary Modern Hebrew I and II (Near Eastern Studies 101-102)

Fall and spring.

#### Elementary Modern Hebrew (Near Eastern Studies 103)

Summer.

#### Intermediate Modern Hebrew I and II (Near Eastern Studies 201-202)

Fall and spring.

#### Introduction to the Bible (Near Eastern Studies 223)

Fall.

#### Jurisprudence and the Holocaust (Near Eastern Studies 244)

Fall. 2 credits.

M 9:05-11. N. Sher.

This seminar will trace the history of judicial efforts to bring to justice the perpetrators of the Holocaust. Emphasis will be on the principles established at the Nuremberg Trials, as well as analysis of measures taken and legal precedent established in Europe, Israel, and the United States to uncover and prosecute alleged Nazi criminals.

**Seminar: The Eichmann Case (Near Eastern Studies 244)**

Spring. 2 credits. Prerequisites: 241 and/or 244 or permission of instructor. Enrollment limited to 20 students.

M 9:05–11. N. Sher.

The Israeli trial of Eichmann raised profound legal, moral, and philosophical questions, which are still the subject of much debate. The seminar will undertake an in-depth look at ex post facto considerations; due process questions, etc. We will also discuss the trial process itself, focusing on the strategies of both defense and prosecution. In addition, the course will address a myriad of provocative questions raised by the trial, such as the role of Jewish collaborators, the alleged "banality" of Eichmann, and the world's response to the Holocaust. Materials to be used include Hannah Arendt's *Eichmann in Jerusalem*, Jacob Robinson's *And the Crooked Shall Be Made Straight*, Avner Less's *Eichmann Interrogated*, portions of the court judgment and trial record.

**Introduction to Classical Jewish History (Near Eastern Studies 248)**

Fall.

**Introduction to Modern Jewish History (Near Eastern Studies 249)**

Spring.

**Jewish Sectarian Literature and History in Late Antiquity (also NES 279)**

Spring.

**Modern History of the Middle East: Changing Politics, Society, and Ideas (Near Eastern Studies 294 and Government 358)**

Fall.

**Advanced Modern Hebrew I and II (Near Eastern Studies 301 and 302)**

Fall and spring.

**History into Fiction: Nazis and the Literary Imagination (Near Eastern Studies 404, also Comparative Literature 404, English 404, and Jewish Studies Program)**

Fall. 4 credits.

TR 11:40–12:55. E. Rosenberg.

The twelve years of Hitler's rule remain the most critical, "longest" years of the century. We shall read some seven or eight texts by Anglophone and Continental novelists (and one or two playwrights) that explore salient features of the regime: Hitler's rise to power (e.g., Mann's *Mario and the Magician*, Hughes's *Fox in the Attic*); civilian life in Nazi Germany (e.g., Isherwood's *Berlin Stories*, Brecht's *Private Life of the Master Race*, Grass's *Dog Years*); World War II (Boell's fiction); the Occupation (Sartre's *Flies* or Camus's *Plague*, Nabokov's *Aleppo*); the American brand (Lewis's *It Can't Happen Here*, Faulkner's *Percy Grimm*); the persecution of European Jews (Sartre's *Childhood of a Leader*, selections from Julian Barnes' novel *History of the World*, Jakov Lind's *Soul of Wood*). Historical commentary; brief ancillary selections by Adorno, Arendt, Sartre. Two short papers, no exam.

**Medieval Hebrew Biblical Exegesis (Near Eastern Studies 428 and Medieval Studies 428)**

Spring.

**Independent Study, Undergraduate Level (Near Eastern Studies 491–492)****Independent Study Honors Seminar (Near Eastern Studies 499)****Independent Study, Graduate Level (Near Eastern Studies 691–692)****Courses Not Offered 1990–91.****Readings in Classical Hebrew Literature: The Art of Biblical Narrative (Near Eastern Studies 221)****Readings in Classical Hebrew Literature: The Art of Biblical Poetry (Near Eastern Studies 222)****Exodus and Conquest (Near Eastern Studies 226)****Introduction to the Prophets (Near Eastern Studies 227)****Genesis (Near Eastern Studies 228 and 628)****Classics of Hebrew Literature, a Survey: The Hebrew Literary Tradition (Near Eastern Studies 231 and Comparative Literature 231)****The Lyrics of Love and Death: Medieval Hebrew Poetry in Translation (Near Eastern Studies 233 and Comparative Literature 333)****Muslims, Christians, and Jews in Islamic Spain: Literature and Society****Israel: Literature and Society (Near Eastern Studies 236)****Aramaic (Near Eastern Studies 238)****The Holocaust: European Jewry, 1933–1945 (Near Eastern Studies 241)****Israel: History and Geography (Near Eastern Studies 242)**

Summer.

**The History and Archaeology of Ancient Israel (Near Eastern Studies 243)****The Emergence of the Modern Jew: 1648–1948 (Near Eastern Studies 245)****Seminar in Jewish Mysticism: From the Zohar to Hasidism (Near Eastern Studies 246)****History of Jewish Textual Interpretation (Near Eastern Studies 247)****Ancient Seafaring (Near Eastern Studies 261 and Archaeology 275)****Introduction to Biblical Archaeology (Near Eastern Studies 263)****Agriculture and Society in the Ancient Near East (Near Eastern Studies 264)****Women in the Hebrew Bible (Near Eastern Studies 292 and Women's Studies 292)****Judaism and Islam in Comparative Perspective (Near Eastern Studies)****Seminar in Medieval Hebrew Literature: The Short Story (Near Eastern Studies 303)****Seminar in Medieval Hebrew Literature: The Novel (Near Eastern Studies 304)****The History and Archaeology of the Ancient Near East (Near Eastern Studies 366 and Archaeology 310)****Undergraduate Seminar in Biblical Literature: Prophecy in Ancient Israel (Near Eastern Studies 322)****Ancient Near Eastern Literature (Near Eastern Studies 332)****Jews of Arab Lands (Near Eastern Studies 346)****Anti-Semitism in Germany and the Jewish Response (Near Eastern Studies 349 and German Studies 349)****Interconnections in the Eastern Mediterranean World in Antiquity (Near Eastern Studies 361)****The History and Archaeology of Ebla (Near Eastern Studies 362)****The History and Culture of Ancient Mesopotamia (Near Eastern Studies 363)****The Divided Monarchy (Near Eastern Studies 365)****The History and Archaeology of the Ancient Near East (Near Eastern Studies 366 and Archaeology 310)****The Shtetl in Modern Yiddish Fiction in English Translation (German Studies 375)****The Yiddish Novel in English Translation (German Studies 350)****Jewish Workers in Europe and America 1789–1948 (Industrial and Labor Relations 381)****Seminar in Hebrew Literature and Poetics (Near Eastern Studies 402)****The Double Identity Crisis: German Jewish Women from Rahel Varnhagen to Hannah Arendt (Near Eastern Studies 409, German Studies 409, Society for the Humanities 409, and Women's Studies 409)****Readings in Judeo-Arabic: Medieval Judeo-Arabic and Hebrew Poetics (Near Eastern Studies 432)****The Holocaust Survivor as Author (German Studies 444/644 and Near Eastern Studies 444)****Seminar in Jewish Mysticism (Near Eastern Studies 693)****John S. Knight Writing Program**

The director of the John S. Knight Writing Program is Harry Shaw, professor in the Department of English. Katherine Gottschalk, senior lecturer in the Department of English, is director of Freshman Writing Seminars. The program's offices are in 159 Goldwin Smith Hall (telephone: 255-4061).

S. Davis (English), M. Gilliland (Writing Workshop), K. Hjortshøj (Writing Workshop), N. Kaplan (English), B. LeGendre (Writing Workshop), J. Martin (Writing Workshop), S. Orlov (Society for the Humanities), J. Pierpont (Writing Workshop), D. Williams (Writing Workshop)

The John S. Knight Writing Program helps to coordinate the teaching of writing for undergraduates in six of the university's schools and colleges (the School of Industrial and Labor Relations and the colleges of Agriculture and Life Sciences; Architecture, Art, and Planning; Arts and Sciences; Engineering; and Human Ecology). The program administers writing seminars for freshmen and upperclass students, tutorial writing classes, and seminars in the teaching of writing. More than twenty-five academic departments participate in the program.

### Advanced Writing Seminars

For upperclass students the program offers three upper-division writing courses, Writing in the Humanities, Writing for Readers/Reading for Writers, and Writing in the Social Sciences. These courses help students write with more confidence and skill in all disciplines while provoking inquiry about the methods and aims of study common to many of them. They may be taken as electives or to fulfill distribution or certain writing requirements.

### Freshman Writing Seminars

For freshmen the program offers the freshman writing seminars—more than 125 different courses in the humanities, social sciences, expressive arts, or sciences. Freshman writing seminars help students write good English prose—prose that, at its best, is characterized by clarity, coherence, intellectual force, and stylistic control. These seminars teach writing within a field while offering freshmen the opportunity to participate in a small seminar. Although they differ widely in content, all seminars adhere to the following guidelines:

- 1) at least thirty pages of assigned writing
- 2) at least eight—and, at most, about fourteen—written assignments
- 3) opportunities for serious revision, not mere editing, of essays (at least some of these revising assignments may satisfy 1 and 2 above)
- 4) ample classroom time spent on work directly related to writing
- 5) reading assignments small enough—about one hundred pages a week at most—to permit regular, concentrated work on writing
- 6) individual conferences

Offerings change from semester to semester. Each term's freshman writing seminars are described in a brochure available from college registrars.

To ensure that students will enjoy the benefits of small writing classes, no freshman writing seminar may comprise more than seventeen students. Instead of pre-enrolling in their writing courses, students request placement in one of five writing seminars by filling out ballots available from their college registrars. Most students receive one of their highest choices. Students may change their writing seminars at the university course exchange or during the add/drop sessions held at the beginning of each semester.

The colleges and the school served by the program accept freshman writing seminars in fulfillment of their individual graduation requirements in categories referred to variously as "freshman writing," "oral and written expression," and the like. The program does

not decide whether students may graduate: it makes courses available. Individual colleges and schools administer their own graduation requirements.

Currently most undergraduate students are required to take two freshman writing seminars. Architecture students, however, need only one. Hotel students fulfill their requirement through Hotel Administration 165, which should be taken with Hotel Administration 265 during the first two semesters at Cornell. Agriculture and life sciences students can take freshman writing seminars or choose from among a variety of other courses to fulfill their requirement.

All students who score "4" or "5" on the Princeton Advanced Placement Examination in English receive three credits. Such credits are awarded automatically; no application to the John S. Knight Writing Program or the Department of English is necessary. How these credits may be applied to freshman writing or other distribution requirements depends on the student's college and score. All students who score "5," except architecture and fine arts students, may apply their three credits towards the writing requirements of their college. Of students who score "4," only agriculture and life science students and industrial and labor relations students may apply their three credits toward the writing requirements of their college. Students should always consult their college registrars to be certain that they understand their writing requirements.

Students who score "4" or "5" on the Princeton AP exam, or "700" or better on the English Composition or CEEB tests, may enroll, space permitting, in the following upper-level freshman writing seminars: English 270, 271, 272, and 276.

Although there are no exemptions from college writing requirements, some students may fulfill all or part of their college's writing requirement through transfer credits or writing-course substitutions.

For work done at other institutions to be accepted as equivalent to freshman writing seminars, students should demonstrate that they have done a reasonably equivalent amount of writing in a formal course. (It is not sufficient to write, for example, one thirty-page term paper.) Students in the College of Engineering and the College of Arts and Sciences must file an "application for transfer evaluation" to request writing credit for such courses; students in other colleges should consult their college registrars.

In unusual situations the program recommends that courses taken at Cornell other than freshman writing seminars fulfill the various freshman writing requirements. Upper-division students may also take a writing course other than a freshman writing seminar and petition to have it satisfy part of the requirement. The program advises students about these courses on request. Students must file the "proposal for course substitution" in advance to request writing credit for such courses.

Although Cornell "summer writing program" seminars may fulfill college writing requirements, they do not automatically count toward those requirements. Students who have taken these courses must ask their college registrars to assign the credits in the appropriate categories.

### Teaching Writing

Each summer and fall, the program offers instruction in the teaching of writing to new staff members in the freshman writing seminars and other interested instructors. Teaching Writing I, offered in conjunction with an apprenticeship in the summer school, is primarily a course for graduate students; the same course is offered alone in the fall as Teaching Writing II. The program also sponsors a summer seminar for faculty members interested in the teaching of writing.

### Writing Workshop

The John S. Knight Writing Program offers Workshops in English Composition for freshmen (or transfer students needing writing credit) through the Writing Workshop. These tutorials in English composition are designed for students who have had little training in composition or who have serious difficulty with writing assignments.

Writing 137 and 138 are graded S-U only, and students receiving a grade of S are normally granted credit toward their college writing requirements. Students who think this course might be appropriate, including non-native speakers of English scoring less than 600 on the Test of English as a Foreign Language (TOEFL), should attend the assessment sessions offered by the Writing Workshop during orientation week each fall. The workshop also offers a walk-in service (see below) to help students with problems in essay writing. The director is Nancy Kaplan, senior lecturer in the Department of English. The workshop offices are in 174 Rockefeller Hall (telephone: 255-6349).

### The Walk-In Service

The Walk-In Service, a unit of the Writing Workshop, offers tutoring assistance in writing to any student who needs help with a writing project. The Walk-In Service has tutors available during the academic year in 174 Rockefeller, 340 Goldwin Smith, and north- and west-campus residential areas. The director is Joseph Martin. For information contact the Writing Workshop, 174 Rockefeller Hall, 255-6349.

### The Macintosh Center

The Macintosh Center, housing twenty microcomputers, is a facility supported by the John S. Knight Writing Program for students enrolled in writing courses. The center offers introductory classes on the Macintosh and works closely with many writing instructors to help students learn how to use word processing as an effective writing tool. The coordinator is William Fleischmann; the center is in 340 Goldwin Smith Hall (telephone: 255-8453).

### Freshman Writing Seminar

#### 137-138 Workshops in English Composition

137, fall; 138, spring. 3 credits each term. Each section limited to 12 students. S-U grades only. Hours to be arranged. N. Kaplan and staff.

An intensive writing experience, this course is designed for those whose composition skills need extra attention. In class discussion, students respond to each other's work and analyze brief additional readings. The average weekly syllabus includes small classes, a tutorial with the instructor, and a paper plus



revision. Each section of this course is individually shaped to respond to the needs of students in that particular class.

### Advanced Writing Seminars

#### 201 Writing in the Humanities (also English 286)

Fall or spring. 3 credits. Limited to 17 students. Registrants must have completed freshman writing requirements. S-U grades with permission of instructor. Carries distribution credit as English 286.

Fall: T R 11:40–12:55. Spring: to be announced. S. Davis.

Writing 201 helps students strengthen reading and writing skills valuable in all disciplines and particularly appropriate to the humanities. It also encourages them to reflect on what they do when they interpret and write about works of literature, philosophy, and visual art. Just what happens when we “read” such works—and what do we mean when we claim to understand them? What audience do our interpretations address, and how can we convey them in writing that is engaging and forceful? How are conflicts of interpretation resolved? How do historical knowledge and theory affect our interpretations? What kinds of knowledge and self-awareness does study in the humanities yield? Works studied in the course challenge our understanding by their strangeness or their uncanny familiarity. They show Western reason in conflict with its real or supposed opposites—alien humanity, artistic inspiration, illusion, madness, the divine, and the will to power. Readings and viewings may include paintings by da Vinci and Velasquez; novels by Nabokov, Conrad, and Achebe; parables by Maxine Hong Kingston, Kafka, and Jesus; Plato's *Gorgias* or *Phaedrus*; Nietzsche's *Birth of Tragedy*; and Euripides' *The Bacchae*.

Students in the course write (and often rewrite) 40 pages of papers and confer frequently with the instructor.

#### 202 Writing in the Social Sciences (also Sociology 202)

Fall or spring. 3 credits. Limited to 17 students. Prerequisite: at least one social-science course. Carries distribution credit as Sociology 202.

Fall: T R 11:40–12:55. Spring: M W F 11:15–12:05. K. Hjortshøj.

This course offers students the opportunity to strengthen their writing, become more aware of the diverse writing styles and strategies used in the social sciences, and experiment with new approaches to composition and revision. Students will benefit from detailed written comments on their work and from extensive discussion of student writing in class. Initial writing and reading assignments will explore styles of description, the ways in which writers adapt their work to different audiences, the differences between academic and popular writing in a particular field, and methods of revision. Subsequent assignments will include the interpretation of primary data, the review of a documentary film, and writing based on research literature in a field of the student's choice. The instructor will hold frequent individual conferences with students to discuss finished essays and work in progress. During the semester students will write, and often revise, 8 to 10 papers—about 40 pages of finished work.

#### 203 Writing for Readers/Reading for Writers (also English 283)

Spring. 3 credits. Limited to 17 students. Prerequisite: permission of the instructor.

T R 10:10–11:25. J. Martin.

This is a writing course for students interested in studying theories and strategies of composition as a way of developing writing skills. By studying a broad range of approaches to the act of writing (from traditional handbooks' definitions to contemporary rhetorical theories), students will learn to identify and use the critical vocabulary that skilled readers rely on to discuss how writing and language develop, focusing on issues such as the role of audience, the patterns of organization, the varieties of language, and the control of style. In addition to weekly writing assignments, the course will include readings in the theories of language and rhetoric. Students will write and revise at least eight essays during the semester. Students interested in the practice of reading and responding to the writing of others are encouraged to take this course and consider becoming tutors in the Writing Workshop's Walk-In Service.

### Latin American Studies

B. J. Isbell, director; L. Beneria, R. Blake, D. Block, D. Castillo, T. Davis, G. Fields, W. Goldsmith, C. Greenhouse, J. Haas, J. Henderson, T. Holloway, S. Jackson, T. Jordan, E. Kenworthy, S. Kyle, T. Lynch, O. Mitchell, C. Morris, J. Piedra, T. Poleman, A. Power, D. Sanjur, D. Sola, J. M. Stycos, M. Suñer, H. D. Thurston, J. Tittler, A. VanWambeke, L. Williams, F. Young

The Latin American Studies Program encourages and coordinates faculty and student interests in Latin America. A variety of special lectures, films, and seminars supplement the regular course offerings. Undergraduate students may arrange an independent major in Latin American studies, and graduate students may pursue a minor in Latin American studies while majoring in the graduate field of their choice. The College of Arts and Sciences offers Latin American studies courses in anthropology, economics, government, history, and sociology. In addition, there is a varied language, literature, and linguistics curriculum in Spanish, Portuguese, and Quechua. The student may also pursue Latin American studies in the College of Agriculture and Life Sciences; the College of Architecture, Art, and Planning; the College of Human Ecology; and the School of Industrial and Labor Relations.

For further information and a current course listing, students should contact the program office, 190 Uris Hall.

### Law and Society

D. Dunning, director, 240 Uris Hall, 255-6391, C. Bohmer (sociology), C. Carmichael (comparative literature), D. A. Dunning (psychology), C. Greenhouse (anthropology), G. Hay (economics), C. Holmes (history), S. Jasanoff (science, technology, and society), M. Katzenstein (government), D. B. Lyons (philosophy), R. Miller (philosophy), M. B. Norton (history), R. Polenber (history), D. Powers (Near Eastern studies), J. Rabkin (government), L. Scheinman (government)

The Law and Society Program offers an interdisciplinary concentration for undergraduates who are interested in the law from the perspectives of the social sciences and the humanities: anthropology, comparative

literature, economics, government, history, philosophy, psychology, science, technology and society, and sociology. In addition, undergraduates in the College of Arts and Sciences can major in law and society through the Independent Major Program. Students who wish to graduate with a concentration in law and society should consult the director of the program or one of the advisers listed above to plan a coherent program of study. Such a program should ordinarily include at least four courses from the following list. Other courses may be substituted with the approval of the adviser.

**Anthropology 328 Law and Culture**

**Anthropology 329 Power and Culture**

**Anthropology 627 Legal Anthropology**

**Comparative Literature 326 Christianity and Judaism**

**Comparative Literature 427 Seminar on Biblical Law**

**Economics 304 Economics and the Law**

**Economics 354 Economics of Regulation**

**Government 313 The Nature, Functions, and Limits of Law**

**Government 323 The “Fourth” Branch**

**Government 327 Civil Liberties in the United States**

**Government 328 Constitutional Politics: The United States Supreme Court**

**Government 364 Liberty, Equality, and the Social Order**

**Government 389 International Law**

**Government 407 Law, Science, and Public Values**

**Government 414 The Administrative State**

**Government 428–429 Government and Public Policy: An Introduction to Analysis and Criticism**

**Government 457 Comparative Public Law: Legal Controls on Government in Europe and America**

**Government 489 International Law and Regime Development**

**History 275 Crime and Punishment: From the Puritans to Mickey Spillane**

**History 318 American Constitutional Development**

**History 367 Church and State during the Middle Ages**

**History 421 Constitutionalism as a Cultural Problem in America**

**History 430 Law and Authority in American Life**

**Near Eastern Studies 357 Islamic Law and Society**

**Philosophy 319 Philosophy of Marx**

**Philosophy 342 Law, Society, and Morality (also Law 666)**

**Philosophy 446 Topics in Social and Political Philosophy**

**Psychology 265 Psychology and Law**

**Sociology 207 Ideology and Social Concerns**

**Sociology 310 Sociology of War and Peace**

**Sociology 348 Sociology of Law**

**Sociology 372 Sex Discrimination: Law and Social Policy (also Government 306)**

**Sociology 409 Interpretation, Authority, and the Law (also Government 409)**

**Biology and Society 406 Biotechnology, Society, and Law**

**Biology and Society 426 The Social Functions of Law and Medicine**

**City and Regional Planning 480 Environmental Politics**

**City and Regional Planning 656 Land Resources Protection Law**

**Civil and Environmental Engineering 524 Contemporary Issues in Environmental Law and Policy**

**Civil and Environmental Engineering 525 Environmental Law I**

**Consumer Economics and Housing 485 Consumers and the Law**

**Industrial and Labor Relations 607 Arbitration and Public Policy**

**Industrial and Labor Relations 680 Problems in Union Democracy**

## Medieval Studies

Marilyn Migiel, director; B. B. Adams, F. M. Ahl, R. Brann, E. W. Browne, R. G. Calkins, A. M. Colby-Hall, R. T. Farrell, A. B. Groos, W. Harbert, T. D. Hill, P. R. Hyams, J. H. Jasanoff, J. J. John, W. J. Kennedy, N. Kretzmann, S. Mehrez, C. Moron-Arroyo, J. M. Najemy, J. S. Noblitt, D. S. Powers, D. M. Randel, S. Senderovich, D. R. Shanzer, B. Tierney, W. Wetherbee

Undergraduates interested in Medieval Studies have an opportunity to take courses in the following areas of instruction: medieval Hebrew, Arabic, and Latin; Old English, Middle English, and medieval Irish and Welsh; Old Provençal and medieval French; medieval Spanish and Italian; Old Saxon, Old High German, Middle High German, Gothic, Old Norse (Old Icelandic); Old Russian; comparative literature; medieval art and architecture; medieval history; Latin paleography; medieval philosophy; musicology; comparative Slavic linguistics, comparative Romance linguistics, and comparative Germanic linguistics.

Undergraduates who want to undertake an independent major or a concentration in Medieval Studies should consult the director of the program, 259 Goldwin Smith Hall.

Information for prospective graduate students is contained in the catalog of the Graduate School and in a brochure on Medieval Studies, which can be obtained from the director.

## Freshman Writing Seminars

**101 Aspects of Medieval Culture**  
Fall or spring. 3 credits.  
Staff.

Under this very general heading a variety of courses are offered each year. A course may center on a particular kind of writing (e.g., biography, narratives of crusades or pilgrimages) or on a particular theme (e.g., the status of the individual, women in medieval society, encounters with other cultures and with the supernatural). In most cases, in addition to exploring the distinctive features of the medieval world view, the course will compare medieval treatments of these forms or themes with the work of modern writers.

**102 The Literature of Chivalry**  
Fall, spring, or summer. 3 credits.  
Staff.

Romances of chivalry, especially those devoted to King Arthur and the knights of the Round Table, were not only the most popular literature of medieval Europe, but also a vehicle for examination of social ideals. This course explores the development of chivalric culture in such works as the *Lais* of Marie de France, the romances of Chrétien de Troyes, French and German stories of Tristan and Perceval, *Sir Gawain and the Green Knight*, Malory's *Morte d'Arthur*, and modern works on related themes. Discussion will investigate fundamental problems raised by these works: the individual in society, the development of the hero, the nature of love, and the conflict of religious and secular ideals.

**103 Legend, Fantasy, and Vision**  
Fall or spring. 3 credits.  
Staff.

Re-creation of the legendary past, imaginary voyages to other worlds, and the invention of ideal societies are among the ways in which medieval writers attained a perspective on social, scientific, and religious questions. This course will survey examples of such writing from various medieval cultures (e.g., Icelandic sagas, the Irish *Voyage of St. Brendan*, the Anglo-Saxon epic *Beowulf*, French and German romances of King Arthur and his knights, Dante's *Divine Comedy*), and we will consider the continuity of these writings with selected works of modern fiction.

## Graduate Seminars

Courses in various aspects of medieval studies are offered each year in numerous cooperating departments, including Classics, Comparative Literature, English, History, History of Art, Modern Languages and Linguistics, German Literature, Romance Studies, Russian Literature, Music, Near Eastern Studies, and Philosophy, and by the Society for the Humanities. An up-to-date listing of the courses offered in each term will be made available at the Medieval Studies office as soon as the Course and Time Roster is published.

## Modern European Studies Concentration

Susan Tarrow, coordinator

Students from any college may choose an undergraduate concentration in modern European studies to complement any major in any college. The purpose of the concentration is to provide a coherent structure for students with an interest in interdisciplinary study in the field of European studies.

The concentration has two tracks:

European culture comprises courses in English and European literatures, comparative literature, semiotics, fine arts, music, architecture, film and theater arts, and women's studies.

European society comprises courses in European and comparative politics, social and political history, anthropology, sociology, philosophy, women's studies, and related courses in the School of Hotel Administration, the College of Agriculture and Life Sciences, and the School of Industrial and Labor Relations.

The requirements for completion of the concentration are

- 1) Completion of the European studies interdisciplinary core course (History 283/Government 343/German 285)
- 2) Three additional courses in European studies with at least one from each of the two tracks. (No more than one of these courses may be used to satisfy requirements for the student's major.)
- 3) Competence in at least one modern Western European language (i.e., completion of a 300-level course or equivalent with a grade of at least B- or demonstration of an advanced level of competence in an oral proficiency interview test where available).

Students who want to take honors in the concentration must choose a senior seminar in the field and complete an honors essay. All concentrators are encouraged to spend a semester or more in a program of study in Europe and to participate in the Language House Program.

Undergraduates in the College of Arts and Sciences can major in European studies through the Independent Major or College Scholar programs.

For a list of relevant courses and seminars, departmental advisers, and any further information, contact Susan Tarrow, coordinator of the Modern European studies concentration, at the Western Societies Program, 130 Uris Hall (telephone: 255-7592).

## Religious Studies

B. Adams, chairman; R. Ahmed, C. M. Arroyo, R. Baer, J. P. Bishop, R. Brann, R. Calkins, C. M. Carmichael, K. Clinton, J. Fajans, D. Gold, J. Henderson, D. Holmberg, P. Hyams, J. John, S. Katz, T. Kirsch, N. Kretzmann, J. (Swanberg) Law, K. March, R. L. Moore, D. Owen, D. Powers, D. Randel, G. Rendsburg, J. Rusten, D. Shanzer, J. Siegel, B. Tierney, M. Washington, A. Wood.

Religious Studies is an interdisciplinary program reflecting a wide variety of academic interests and disciplines. The intention of the program is to provide a formal structure for the study of religions at the undergraduate level. A student may fulfill the requirement for a concentration in religious studies by completing a minimum of four courses that have been approved by an adviser in the area of concentration.

The program is administered by a committee. The chairman is Professor Adams, 309 Rockefeller Hall.

Courses in religious studies currently offered include the following:

**Religious Studies 101 Introduction to the Study of Religion**

Spring. 3 credits.

D. Gold and others.

A team-taught course designed to introduce students to the contemporary study of religion. Through an examination of selected religious traditions of the world, the course will explore topics having to do with personal piety (including mysticism, myth, and philosophy) as well as those having to do with the leadership of religious communities, the development of religious institutions, and the formation of scriptural canon. Analysis of the ways in which these phenomena have interacted in specific cases will lead to a consideration of more general questions about the dynamics of religious traditions and the roles they continue to play in contemporary life. Highly recommended for students considering a concentration in Religious Studies.

**Anthropology 424 Myth, Ritual, and Sign**

Fall. 4 credits.

J. Siegel.

**Asian Studies 250 Introduction to Asian Religions**

Fall. 3 credits.

J. McRae.

**Asian Studies 351 The Religious Traditions of India**

Spring. 4 credits.

D. Gold.

**Asian Studies 358 Buddhism in China**

Fall. 4 credits.

J. McRae.

**Asian Studies 359 Japanese Buddhism**

Spring. 4 credits.

J. (Swanberg) Law.

**Asian Studies 421 Religious Reflections on the Human Body**

Fall. 4 credits.

J. (Swanberg) Law.

**Asian Studies 435 Chinese Buddhist Texts**

Spring. 4 credits.

J. McRae.

**Asian Studies 467-468 Readings in Sanskrit Literature: The Vedas**

Fall and spring. 3 credits each.

C. Minkowski.

**Classics 202 The New Testament**

Spring. 3 credits.

J. Rusten.

**Classics 239 Greek and Roman Mystery Cults and Early Christianity**

Spring. 3 credits.

K. Clinton.

**Classics 468 Augustine's Confessions**

Fall. 4 credits.

D. Shanzer.

**Comparative Literature 324 Selected Problems of Law and Religion**

Fall. 4 credits.

C. Carmichael.

**Comparative Literature 326 Christianity and Judaism**

Spring. 4 credits.

C. Carmichael.

**Comparative Literature 328 Literature of the Old Testament**

Fall. 4 credits.

C. Carmichael.

**Comparative Literature 426 New Testament Seminar**

Spring. 4 credits.

C. Carmichael.

**History 417 Islam in South Asia**

Fall. 4 credits.

R. Ahmed.

**History 437 Church and State in the Middle Ages**

Fall. 4 credits.

B. Tierney.

**Natural Resources 407 Religion, Ethics, and the Environment**

Spring. 3 credits.

R. Baer.

**Near Eastern Studies 223 Introduction to the Bible**

Fall. 3 credits.

G. Rendsburg.

**Near Eastern Studies 243 History and Archaeology of Ancient Israel**

Spring. 4 credits.

D. Owen.

**Near Eastern Studies 250 Shi'ism and the Iranian Revolution**

Fall. 3 credits.

J. Katz.

**Near Eastern Studies 279 Jewish Sectarian Literature in Late Antiquity**

Spring. 3 credits.

S. Schwartz.

**Near Eastern Studies 351 Introduction to Islamic Law**

Spring. 4 credits.

D. Powers.

**Near Eastern Studies 428 Medieval Hebrew: Biblical Exegesis**

Spring. 4 credits.

R. Brann.

**Philosophy 263 Reason and Religion**

Fall. 4 credits.

N. Kretzmann.

**Philosophy 663 Seminar in Philosophy of Religion**

Spring. 4 credits.

N. Kretzmann.

**Russian and Soviet Studies Major**

M. G. Clark (emeritus), G. J. Staller, J. Vanek (economics); M. Rush (government); W. M. Pintner (history); W. W. Austin (emeritus); U. Bronfenbrenner (emeritus, psychology); P. Carden, G. Gibian, N. Pollak, M. Scammell, S. Senderovich, G. Shapiro (Russian literature); L. H. Babby, W. Browne, R. L. Leed (Slavic linguistics)

The major in Russian and Soviet studies has the following requirements:

- 1) Qualification in Russian.
- 2) At least one course relating to Russia, at the 200 level or above, in each of the following departments: Government, Economics, History, and Russian Literature. (A course in another department may be substituted for one of the above with the consent of the major adviser.)

- 3) At least three additional courses, at the 250 level or above, in one of the following departments: Government, History, Economics, or Russian Literature. These courses are selected in consultation with the student's adviser and are to be approved as appropriate for a major in Russian and Soviet studies.

Professor Pintner will serve as adviser for all majors, but each student should also designate an additional adviser in the department in which his or her work is concentrated.

Students must apply for the major at the Soviet and East European Studies Program, 236 Goldwin Smith Hall.

**Courses****[Economics 329 Eastern Europe Today: Economics, Government, Culture (also Government 326 and Russian Literature 329)]**

Fall. 4 credits. Not offered 1990-91.

G. Staller, M. Rush, G. Gibian.]

**[Economics 367/567 Comparative Economic Systems]**

Fall. 4 credits. Not offered 1990-91.

G. Staller.]

**[Economics 381 Economics of Participation and Worker Management]**

Fall. 4 credits. Not offered 1990-91.

J. Vanek.]

**Economics 382 The Practice and Implementation of Self-Management**

Spring. 4 credits.

J. Vanek.

**[Economics 681 Self-Management]**

Fall. 4 credits. Not offered 1990-91.

J. Vanek.]

**[Economics 682 Seminar on Economics of Participation and Labor-Managed Systems]**

Spring. 4 credits. Not offered 1990-91.

J. Vanek.]

**[German Studies 376 Contemporary Soviet Latvian Literature]**

Fall. 4 credits. Taught in Latvian. Not offered 1990-91.

I. Ezergailis.]

**Government 333 Government and Politics of the Soviet Union**

Fall. 4 credits.

M. Rush.

**[Government 446 Comparative Communism]**

Fall. 4 credits. Not offered 1990-91.

M. Rush.]

**[Government 481 Foreign Policy of the U.S.S.R.]**

Spring. 4 credits. Not offered 1990-91.

M. Rush.]

**History 252 Russian History to 1800**

Fall.

W. Pintner.

**History 253 Russian History since 1800**

Spring. 4 credits.

W. M. Pintner.

**History 471 Russian Social History**

Spring. 4 credits.

W. M. Pintner.

**[History 486 The Formation of the Russian Intelligentsia, 1700-1850]**  
Fall. 4 credits. Not offered 1990-91.  
W. M. Pintner.]

**History 677 Seminar in Russian History**  
Fall or spring. 4 credits.  
W. M. Pintner.

**Human Development and Family Studies 488 (also Psychology 488) Development in Context**  
Spring. 4 credits.  
U. Bronfenbrenner.

**[Polish 131-132 Elementary Course]**  
131, fall; 132, spring. 3 credits each term. Not offered 1990-91.  
W. Browne.]

**[Polish 133-134 Intermediate Course]**  
133, fall; 134, spring. 3 credits each term. Not offered 1990-91.  
W. Browne.]

**Russian 101-102 Elementary Course**  
101, fall; 102, spring. 6 credits each term.  
R. L. Leed and staff.

**Russian 103 Freshman Writing Seminar: Classics of Russian Thought and Literature**  
Fall or spring. 3 credits.  
Staff.

**Russian 104 Freshman Writing Seminar: Nineteenth-Century Russian Literary Masterpieces**  
Fall or spring. 3 credits.  
Staff.

**Russian 105 Freshman Writing Seminar: Twentieth-Century Russian Literary Masterpieces**  
Fall or spring. 3 credits.  
Staff.

**Russian 108 Freshman Writing Seminar**  
Fall or spring. 3 credits.  
Staff.

**Russian 121-122 Elementary Course**  
121, fall; 122, spring. 4 credits each term.  
R. L. Leed and staff.

**Russian 123 Continuing Russian**  
Fall or summer. 4 credits.  
Staff.

**Russian 201-202 Readings in Russian Literature**  
201, fall, N. Pollak; 202, spring, G. Shapiro. 3 credits each term.

**Russian 203-204 Intermediate Composition and Conversation**  
203, fall or spring; 204, spring. 3 credits each term.  
L. Paperno and S. Paperno.

**Russian 205-206 Russian for Scientists**  
205, fall; 206, spring. 2 credits each term.  
S. Paperno, R. L. Leed.

**[Russian 207 Themes from Russian Culture I]**  
Fall. 4 credits. Not offered 1990-91.  
M W F 9:05. G. Shapiro.]

**Russian 208 Themes from Russian Culture II**  
Spring. 4 credits.  
M W F 9:05. G. Shapiro.

**Russian 301-302 Advanced Russian Grammar and Reading**  
L. H. Babby

**Russian 303-304 Advanced Composition and Conversation**  
303, fall; 304, spring. 4 credits each term.  
L. Paperno and S. Paperno.

**Russian 305-306 Directed Individual Study**  
305, fall; 306, spring. 2 credits.  
Staff.

**[Russian 329 Eastern Europe Today: Economics, Government, Culture (also Economics 329 and Government 328)]**  
Fall. 4 credits. Not offered 1990-91.  
G. Gibian, M. Rush, G. Staller.]

**[Russian 330 The Soviet Union: Politics, Economics, and Culture (also Economics 330 and Government 330)]**  
Spring. 4 credits. Not offered 1990-91.  
T R 2:55-4:10. G. Gibian, M. Rush, G. Staller.]

**Russian 331 Introduction to Russian Poetry**  
Fall. 4 credits.  
T R 11:40-12:55. S. Senderovich.

**[Russian 333 Twentieth-Century Poetry]**  
Spring. 4 credits. Not offered 1990-91.  
T R 11:40-12:55. N. Pollak.]

**Russian 334 The Russian Short Story**  
Spring. 4 credits.  
T R 2:55-4:10. P. Carden.

**[Russian 335 Gogol]**  
Spring. 4 credits. Not offered 1990-91.  
Staff.]

**[Russian 350 Education and the Western Literary Tradition (also Comparative Literature 350 and College Scholar 350)]**  
Spring. 4 credits. Not offered 1990-91.  
P. Carden.]

**Russian 367 The Russian Novel**  
Fall. 4 credits.  
T R 2:55-4:10. G. Gibian.

**[Russian 371 Literature of the Third Wave]**  
Spring. 4 credits. Not offered 1990-91.  
M. Scammell.]

**[Russian 373 Chekhov]**  
Fall. 4 credits. Not offered 1990-91.  
S. Senderovich.]

**[Russian 375 Literature of the Soviet Period 1917-1945]**  
Fall. 4 credits. Not offered 1990-91.  
M. Scammell.]

**[Russian 376 Literature of the Soviet Period 1945-1985]**  
Spring. 4 credits. Not offered 1990-91.  
M. Scammell.]

**[Russian 380 Soviet Dissident Literature]**  
Fall. 4 credits. Not offered 1990-91.  
M. Scammell.]

**[Russian 388 Ideas and Form in Novels of Social Inquiry (also Comparative Literature 388)]**  
Spring. 4 credits. Not offered 1990-91.  
G. Gibian.]

**[Russian 390 The Power of Nationalism: Expressions of National Feelings in Politics, Literature, History, and the Arts (also Comparative Literature 390)]**  
Fall. 4 credits. Not offered 1990-91.  
G. Gibian and others.]

**Russian 393 Honors Essay Tutorial**  
Fall or spring. 4 credits each term.  
Staff.

**[Russian 400 Reading the Great Tradition]**  
Fall. 4 credits. Prerequisite: Russian 202 or equivalent. Recommended: a course at the 300 or 400 level in which reading has been done in Russian. This course may be counted toward the 12 credits of Russian literature in the original language required for the Russian major. Not offered 1990-91.  
T R 2:55-4:10. Staff.]

**[Russian 401-402 History of the Russian Language]**  
401, fall; 402, spring. 4 credits each term. Not offered 1990-91.  
L. H. Babby.]

**[Russian 403-404 Linguistic Structure of Russian]**  
403, fall; 404, spring. 4 credits. Not offered 1990-91.  
L. H. Babby.]

**[Russian 409 Russian Stylistics]**  
Fall. 4 credits. Not offered 1990-91.  
S. Senderovich.]

**Russian 413-414 Advanced Conversation and Stylistics**  
413, fall; 414, spring. 4 credits each term.  
L. Paperno and S. Paperno.

**Russian 431 Contemporary Russian Prose**  
Fall. 4 credits.  
T R 1:25-2:40. M. Scammell.

**Russian 432 Pushkin**  
Spring. 4 credits.  
T R 11:40-12:55. G. Gibian.

**Russian 491 Reading Course: Russian Literature in the Original Language**  
Fall or spring. 1 credit.  
Staff.

**Russian 492 Supervised Reading in Russian Literature**  
Fall or spring. 1-4 credits each term.  
Hours to be arranged. Staff.

**[Russian 600 Proseminar: Research Methodology in Russian Literature]**  
Fall. 4 credits. Not offered 1990-91.  
P. Carden.]

**[Russian 601 Old Church Slavic]**  
Fall. 4 credits. Not offered 1990-91.  
E. W. Browne.]

**[Russian 602 Old Russian]**  
Fall. 4 credits. Not offered 1990-91.  
L. H. Babby.]

**Russian 603 Graduate Seminar: Neglected Masterpieces of Short Russian Prose**  
Spring. 4 credits.  
T R 2:55-4:10. G. Gibian.

**Russian 611 Supervised Reading and Research**  
Fall or spring. 2-4 credits.  
Staff.



**[Russian 619 Seventeenth-Century Russian Literature]**

Fall. 4 credits. Not offered 1990-91.  
G. Shapiro.]

**[Russian 620 Twentieth-Century Russian Poetry]**

Spring. 4 credits. Not offered 1990-91.  
N. Pollak.]

**Russian 621 Old Russian Literature**

Spring. 4 credits.  
T 4:15-6:15. S. Senderovich.

**[Russian 624 Russian Romanticism]**

Fall. 4 credits. Not offered 1990-91.  
S. Senderovich.]

**[Russian 625 Russian Realism]**

Spring. 4 credits. Not offered 1990-91. Also open to advanced undergraduates with permission of instructor.  
P. Carden.]

**[Russian 626 The Tradition of Russian Poetry]**

Fall. 4 credits. Not offered 1990-91.  
F 2:30-4:30. N. Pollak.]

**Russian 633-634 Russian for Graduate Specialists**

633, fall; 634, spring. 4 credits each term.  
L. Paperno and S. Paperno.

**Russian 635 Modern Russian Literary Criticism**

Fall. 4 credits.  
W 3:35-5:35. P. Carden.

**[Russian 651-652 Comparative Slavic Linguistics]**

651, fall; 652, spring. 4 credits each term. Not offered 1990-91.  
E. W. Browne.]

**[Russian 669 Seminar: Dostoevsky]**

Fall. 4 credits. Not offered 1990-91.  
G. Gibian.]

**[Russian 671 Seminar in Nineteenth-Century Russian Literature]**

Fall. 4 credits. Not offered 1990-91.  
T 4:15. S. Senderovich.]

**Russian 672 Seminar in Twentieth-Century Russian Literature**

Spring. 4 credits.  
W 3:35-5:35. P. Carden.

**[Russian 673 The Russian Nabokov]**

Fall. 4 credits. Not offered 1990-91. Also open to advanced undergraduates.  
R 4:15-6:15. M. Scammell.]

**[Russian 674 Solzhenitsyn]**

Fall. 4 credits. Not offered 1990-91.  
M. Scammell.]

**Serbo-Croatian 131-132 Elementary Course**

131, fall; 132, spring. 3 credits each term.  
W. Browne.

**Serbo-Croatian 133-134 Intermediate Course**

133, fall; 134, spring. 3 credits each term.  
W. Browne.

**[Ukrainian 131-132 Elementary Course]**

131, fall; 132, spring. 3 credits each term. Not offered 1990-91.  
W. Browne.]

**Concentration in Science, Technology and Society**

The undergraduate concentration in Science, Technology and Society (STS) is designed for students who wish to engage in a systematic, interdisciplinary exploration of the role of science and technology in modern societies. The concentration is intended for students with varied academic interests and career goals. It offers majors in the natural sciences and engineering an opportunity to explore the social, political, and ethical implications of their selected fields of specialization. At the same time it offers students majoring in the humanities and social sciences a chance to study the processes, products, and impacts of science and technology from varied disciplinary perspectives. Drawing on course offerings in several departments, programs, and colleges, the STS concentration permits students to develop an individualized program of study closely related to their major field. STS courses are organized under four major headings: social relations of science and technology; science, technology, and public policy; ethics and values in science and technology; and biology, medicine, and society.

To satisfy the requirements for the STS concentration, students must complete a minimum of four courses selected from the following list. At least one course should be chosen from the list of core courses. The remaining three courses should be chosen in consultation with an STS faculty adviser and must be drawn from at least two of the areas described below.

Interested students may obtain further information about advisers and courses by contacting the STS main office, 632 Clark Hall, 255-3810.

**STS Core Courses**

B&Soc 407 Law, Science, and Public Values (also Govt 407)

B&Soc 415 The Politics of Technical Decisions (also CRP 541, Mgmt NBA 686, Soc 515, Govt 628)

B&Soc 442 Social and Political Studies of Science (also Soc 355, CRP 442)

Hist 281-282 Science in Western Civilization

Hist 380 Social History of Western Technology

**Social Relations of Science and Technology**

B&Soc 288 History of Biology (also Hist 288, BioS 202)

B&Soc 300 Investigative Research on Social Impact of Science

B&Soc 460 Social Analysis of Ecological Change

Comm 352 Science Writing for the Mass Media

Comm 360 Science Writing for Public Information

Comm 626 Impact of Communication Technologies

Comm 666 Perspectives on Science Communication

Engr 101 The Computer Age (also CS 101)

Engr 250 Technology in Western Society (also EE 250)

Engr 292 The Electrical and Electronic Revolutions (also EE 292)

Hist 287 Evolution (also BioS 207)

Hist 433 Comparative History of Science

Hist 444 Historical Issues of Gender and Science (also Wms Stds 444)

Hist 686 Historiography of Science and Technology

Hist 687 History of Agricultural Science

ILR 626 Science and Innovation in Industry

N Res 331 Beyond the Year 2000 (also Govt 331)

Psych 277 Psychology of Sex Roles (also Wms Stds 277, Soc 277)

R Soc 208 Technology and Society

R Soc 324 Environment and Society

**Science, Technology, and Public Policy**

B&Soc 406 Biotechnology and Law

B&Soc 426 Medicine and the Law

CEE 598 Decision Making in Engineering Systems

Econ 302 The Impact and Control of Technological Change (also Govt 302, CRP 440)

Engr 400 Science, Risk, and Public Policy (also T&Am 400, Econ 358)

Govt 381 The Politics of Defense Spending

Govt 483 The Military and New Technology

ILR 374 Technology and the Worker

Phys 206 War and Peace in a Nuclear Age

**Ethics and Values in Science and Technology**

B&Soc 205 Ethics and Health Care (also Phil 245, BioS 205)

B&Soc 206 Ethics and the Environment (also Phil 246, BioS 206)

Engr 360 Ethical Issues in Engineering

HSS 600.7 Professional Ethics and Public Policy

N Res 407 Religion, Ethics and the Environment

Phil 381 Philosophy of Science: Knowledge and Objectivity

**Biology, Medicine, and Society**

B&Soc 232 Recombinant DNA Technology and Its Applications (also BioS 232)

B&Soc 301 Biology and Society: Social Construction of Life (also BioS 301, Anthro 301)

B&Soc 322 Medicine and Civilization

B&Soc 434 Biotechnology: Science Values and Policy (also BioS 434)

B&Soc 469 Food, Agriculture, and Society (also BioS 469)

B&Soc 482 Human Genetics and Society

Entom 370 Pesticides and the Environment (also Tox 370)

Hist 233 Agriculture, Technology and Society

N Res 401 Environmental and Natural Resources Policies

Psych 387 Health and Disease

## Social Relations Major

A. T. Kirsch, director of undergraduate studies, 200 McGraw Hall, 255-3505; C. Greenhouse, D. Hayes, B. J. Isbell, W. W. Lambert, V. Nee, L. Smith-Lovin, R. Williams

The major in social relations is offered jointly by the Department of Anthropology and the Department of Sociology. It provides the student with basic competence in cultural anthropology, social psychology, and sociology and gives particular emphasis to the common methods of research in these disciplines. The student is expected to obtain a grasp of the common interests and unique insights of the three disciplines, and in the senior Social Relations Seminar is expected to integrate aspects of their theory and data.

Students seeking admission to the program should have completed the following prerequisites: (a) Sociology 101 or Anthropology 212; (b) Psychology 101 or 280 or Sociology 280; and (c) Sociology 301 or Psychology 350 or an equivalent course in statistics.

The major calls for a minimum of 36 credits of course work as follows:

- 1) two related courses to be selected in consultation with the major adviser, in each of the three following disciplines: anthropology, social psychology, and sociology. Ordinarily these courses should be at the 300 level or above, but in special circumstances the adviser may approve one or two courses at the 200 level.
- 2) at least one course in methods, to be selected from the following: anthropological methods, techniques of experimentation (psychology), methods in sociology, philosophy of science or of social science, or advanced statistics
- 3) at least one course in theory related to social relations
- 4) the senior seminar in social relations (Sociology 497 or Anthropology 495)

A list of the courses that may be used to satisfy the requirements for a major in social relations is available from any of the major advisers.

## Society for the Humanities

Jonathan Culler, director

### Fellows for 1990-91

David Bathrick (Cornell University)

Rachel Bowlby (University of Sussex)

Noel Carroll (Cornell University)

Alexander Doty (Lehigh University)

Jane Feuer (University of Pittsburgh)

Simon Frith (Strathclyde University)

James William Gibson (Southern Methodist University)

Karal Ann Marling (University of Minnesota)

Marilyn Migiel (Cornell University)

Trinh T. Minh-Ha (San Francisco State University)

Laura Mulvey (Film Maker)

Tim Murray (Cornell University)

Jonathan Ngate (Cornell University)

Constance Penley (University of Rochester)

Thomas Ross (Union College)

Mark Seltzer (Cornell University)

The Society annually awards fellowships for research in the humanities. The Fellows offer, in line with their research, informal seminars intended to be exploratory or interdisciplinary.

These seminars are open to graduate students, suitably qualified undergraduates, and interested auditors. Students who want credit for a seminar should formally register in their own college. Persons other than those officially enrolled may attend as visitors with permission of the Fellow.

The Society's theme during 1990-91 will be **The Humanities and the Challenge of Mass Culture.**

### 402 Video Verité: Televised Reality, Docudrama, and the Response of Multicultural Video (also English 402)

Fall. 4 credits.

T 2:30-4:25. T. Murray.

The course will study different forms of documenting everyday life on television and video. How do we draw the line between fiction and reality in the broadcast news, the television docudrama, and the video documentary? In analyzing the narrative and psychoanalytical conventions of video dramatized news, we will give special consideration to the relation of video form and style to representations of subjectivity, gender, and ethnicity. We will pay close attention to experimentations with video by multicultural artists who probe the relation of video documentation to the representation of cultural difference (race, nationality, sexuality, and class). How do multicultural artists profit from mixing media that have served as the technological tools of colonializing systems of representation? And how does multicultural experimentation with film and video contribute to the theoretical understanding of the media? In addition to viewing video tapes selected for the course, we will study material from the Johnson Museum of Art's weekly *Expanding Cinema* series.

### 409 Images of Fetishism, Narratives of Curiosity (also English 409)

Fall. 3 credits.

R 10:10-12. L. Mulvey.

The seminar will take the question of fetishism as its point of departure, considering the concept as a symptom both of the language of the unconscious and of the circulation of commodities. Using images and narratives from popular culture, the seminar will also place the processes of displacement and denial associated with fetishism in juxtaposition with narrative mechanisms activated by enigma and curiosity.

### 410 Disneyland and Its Origins: Consumption, Mobility, and Leisure in 1950s America

Spring. 3 credits.

M 2:30-4:25. K. A. Marling.

This interdisciplinary seminar aims to explore both the historical precedents from the theme park Walt Disney opened in Anaheim, California, in the summer of 1954—conventional parks and cemeteries, World's Fairs, touring midways, historic houses and villages, the celluloid world of the movies—and its relationship to Ike's America, the fast-spending, family-centered, TV-mad, suburban culture of the 1950s. Attention will also be paid to the technological and iconographic evolution of the park in its first decade, and most especially to Disney's collaboration with Robert Moses on

attractions (later moved to California) for the 1964 New York World's Fair.

### 411 Contemporary Film Theory (also Theatre 414, English 410, and Women's Studies 431)

Fall. 3 credits.

T 11:10-1:05. C. Penley.

This course will survey the major figures and ideas that have shaped contemporary film theory: Christian Metz's semiotics of the cinema, Raymond Bellour and Thierry Kuntzel's textual analyses of film, Jean-Louis Baudry's "Apparatus" theories, Stephen Heath's work on narrative and ideology, and Laura Mulvey's feminist and psychoanalytic approach to describing spectatorship. In addition the course will cover the most important revisions and refutations of those theories by feminists, Marxists, neo-formalists, deconstructionists, cognitive theorists, cultural studies and popular culture scholars, and so on. Attention will also be given to the social and institutional forces that have shaped this relatively new and volatile discipline.

### 412 The Good and the Bad in Popular Culture (also Music 412)

Spring. 3 credits.

R 2:30-4:25. S. Frith.

Academic accounts of popular culture tend to treat the question of value in very general terms. Either mass-produced art is taken to be worthless by definition (e.g., Adorno, Bloom) or else the popular and the valuable are simply equated (e.g., Kiske). The purpose of this course is to examine the quality of popular culture more rigorously, and there will be less interest in the familiar critical commentaries than in investigating the ways in which value judgments work in the actual production and consumption of popular music, television, film, fiction, etc.

### 413 American Music (also Music 413)

Fall. 3 credits.

R 2:30-4:25. T. Ross.

A study of several traditions in America's musical fabric, such as jazz, shape-note singing, zydeco, salsa, symphonic and experimental music, rock 'n' roll, and one-man bands. How are these defined, and what mutual influences can be observed both near at hand and globally? Diverse musical ethnicities are examined through lecture, field-tapes (video and audio), reading, and some in-class performance.

### 414 Modernity, Femininity, Consumerism (also Women's Studies 434 and English 414)

Spring. 3 credits.

M 12:20-2:15. R. Bowlby.

The tradition of literary modernity is generally seen as opposed to consumerism, whether considered as an exclusive focus on material and monetary values, or (rather differently) as a feminine capitulation of the lures of a homogeneous mass culture. This course will question the implications and the validity of that dichotomy by looking in detail at representations of the woman, the artist, the consumer, and consumer culture in literary, theoretical, and popular texts by authors such as Baudelaire, Barthes, Benjamin, Freud, Friedan, Nabokov, Wilde, and Woolf.

**415 Mass Culture (also Theatre Arts 415)**  
Fall. 3 credits.

W 2:30-5:30. J. Feuer.

This seminar will approach the subject of 'Popular' culture from the perspective of contemporary critical theory. We will focus upon the products of the U.S. mass-culture industry (e.g., films, TV, music, fashion), with an emphasis on the analysis of television. We will consider both the varying theoretical approaches to mass culture and specific studies of forms of mass culture using these approaches. Case studies might include: romance novels, James Bond, teen films, TV and postmodernism, TV soap operas, MTV, made for TV movies and others. The course readings will be chosen primarily from recent studies which, although theoretical in nature, focus upon *specific* cultural phenomena and often synthesize several theoretical models.

**416 Cinema and the Humanism of Commodity (also Theatre Arts 416 and Women's Studies 436)**

Spring. 3 credits

T 12:20-2:15. Trinh T. Minh-Ha.

Media production plays a primary role in maintaining a system of depoliticized multicultural diversity, which keeps each marginal group in a definable place as the latter is urged to provide the expected "difference." The seminar will emphasize issues of race and gender in representation, focusing on works that challenge conventional notions of subjectivity, of audience, and of interpretation in relation to film making, film viewing, and the cinematic apparatus. It will discuss the effect of social multiplication of images through which the whole world, in the name of humanism, is gathered within the fold of the known and the visible, and becomes appropriate.

**417 Fascism and Mass Culture (also Comparative Literature 417, German Studies 417, and Theatre Arts 417)**

Fall. 4 credits. Taught in English for advanced undergraduate and graduate students.

W 3:30-5:30. D. Bathrick.

This course will study the role and evolution of mass culture in the Third Reich between 1933 and 1945. In so doing, we will seek to demonstrate *why* and *how* the Nazis were able to use forms of aesthetic representation and mass media communication to establish and maintain political control during this period. Three things will be emphasized: 1) A comparative approach that explores the similarities and differences in the developments of mass-mediated culture during the 1930s within liberal/capitalist, communist/Stalinist, and fascist societies; 2) A focus upon the "aestheticizing of politics" (Walter Benjamin) by the Nazis as the key to understanding their appropriation of mass culture as a mode of domination. 3) Finally, as a main part of the course, a study of individual cultural documents of mass culture. This will include careful interpretive analysis of films (*Jud Süß*, *Triumph of the Will*, *Baron Münchhausen*), literature (popular novels, utopian novels, poetry, etc.), theatre (the Nazi use of the classics such as Shakespeare, Goethe, Schiller, Nazi plays), art (a study of Nazi painters—Arno Brekner, etc.).

**418 Gay Perspectives and Mass Culture**  
Spring. 3 credits.

R 12:20-2:15. A. Doty.

How do gays read such products of mass culture as film, television, music and advertising? Is there a definable "gay sensibility" that informs these encounters with mass culture texts? How might we theorize gay spectatorship/gay readings of mass culture? These questions address the most general concerns of this seminar, which will work through the issues suggested by these questions with reference to a number of topics: misogyny, camp, drag, cult, consumerism, and homoeroticism.

**419 Bodies, Technologies, Mass Culture (also English 419)**

Fall. 4 credits.

M 12:20-2:15. M. Seltzer.

The seminar proposes an interdisciplinary investigation of the relays between forms of cultural and technological production in America between 1870 and 1930. Turn-of-the-century American culture has alternatively been described as *naturalist*, as *the culture of consumption*, and as *machine culture*. What binds together these apparently alternative descriptions is the "discovery" that *bodies and persons are things that can be made*. This course will investigate the consequences—social, representational, and theoretical—of such a discovery. The focus will be on the representations of bodies and technologies in the discourse (written and visual) of the period. Some of the questions we will consider are these: How are the sieve-like categories of the body and the machine and of the natural and the cultural reconceived in this period? What are the literary, social, and formal consequences of such a reconception? How are the life process and the machine process rewritten in this period and how do literary and visual practices register such a rewriting? What do the bodies and machines of machine culture look like and what appeals and anxieties do these representations generate?

**420 Mass Culture, Ideology and Philosophy (also Philosophy 443)**

Spring. 4 credits.

W 2:30-4:25. N. Carroll.

This course approaches questions concerning mass culture from a philosophical perspective, asking about the nature of mass culture and reviewing the epistemological problems and prospects of mass culture analysis as well as exploring the resistance of traditional philosophical aesthetics to mass art. The central purpose of this course is to develop a philosophically informed model for analyzing the ideological dimensions of mass culture; the ramifications of this model for issues such as censorship, pornography, and public access with respect to mass media will also be discussed.

**421 Riffraff of the Renaissance**

Fall. 4 credits. Reading knowledge of Italian required.

T 2:30-4:25. M. Migiel.

The predominantly urban centers of northern Italy permitted the rise of a "mass culture" which sought to reinterpret (and to resist) the discursive models and practices offered by the greats of classical and Italian literature, preferring instead subjects, themes, and styles shunned by high culture. In studying the writers who do not conform to the ideological and aesthetic norms of the Renaissance, we will rethink our conception of the relation

between "high" and "low" culture, between canonical and non-canonical works, between "literary" and "non-literary" languages.

**422 Regeneration Through Violence: Post-Vietnam Imaginary Wars and Male Rebirth in American Popular Culture 1974-1990**

Spring. 3 credits.

T R 2:30-4:25. J. W. Gibson.

Defeat in Vietnam created a serious cultural crisis; it ended the long tradition of victory in warfare that had been a central component of both American national identity and male identity. The course will explore the fantasies of winning new wars that have developed over the past 15 years using theories from mythology and psychoanalysis.

**425 Marcham Seminar: Images of Humanity in Medieval China (also History 393)**

Fall. 4 credits.

M 2:30-3:30 and W 2:30-4:25.

J. R. McRae and C. A. Peterson.

The middle period of China's history, essentially the Tang and Sung dynasties, feature some of the highest achievements of Chinese civilization. These centuries (the seventh through the thirteenth) are distinguished by the exceptionally high levels of literature, art, religious and secular thought, and proto-scientific development, as well as by fundamental changes in state, society, and the economy. This seminar will explore the China of this age by examining the lives of several representative figures—a politician, a poet, a Buddhist monk, a Taoist priest, an emperor, an empress, a "detective," and others. The aim will be to reconstruct the inner and outer worlds of men and women perhaps not so far removed from ourselves in their basic motivations and daily concerns.

**426 Marcham Seminar: Black Emancipation in Comparative Perspective (also History 471)**

Fall. 4 credits. One course in American, Afro-American or African History required, permission of instructor.

T 2:30-4:30. M. Washington and D. Ohadike.

This course will explore the black emancipation experiences in comparative perspective. Primary emphasis will be on Africa and the United States; secondary focus will be the Caribbean and Latin America. The African component will investigate social consequences of emancipation, the transformations accompanying that process, and the experiences of former slaves. Perspectives on the Americas will include the complexities of emancipation, its socio-economic results and the legacy of race relations.

**439 Oral and Written Traditions in Africa (also French Literature 439 and Comparative Literature 439)**

Fall. 4 credits. Reading knowledge of French recommended.

M 2:30-4:25. J. Ngate.

Organized around but not limited to two major African epics, *Soundjata* and *Chaka*, this course will enable us to investigate the nature, the validity, and the implications of many francophone African writers' claims to being modern versions of the *griots* of the oral tradition.

**440 African Cityscapes: Urbanization and Its Literary Representations (also Comparative Literature 440, French Literature 440 and Africana 440)**

Spring. 4 credits. Reading knowledge of French recommended.

T 2:30-4:25. J. Ngate.

The course will seek to make sense of the evolving fate of the city in African literature in French: from being presented almost exclusively as a deathtrap for the colonized, the city has now become that ambiguous space in which it is increasingly difficult to say what it means to be African.

**150 Introduction to Cultural Studies (also Comparative Literature 150)**

Fall. 4 credits. Does not satisfy the Freshman Writing Seminar requirement, but will satisfy the distribution requirement.

T R 10:10-11:25. W. Cohen.

An introduction not to culture but to the study of it. This course outlines an emergent field of inquiry concerned with the ultimately political character of meanings, values, subjectivity, and symbolization. Topics include cultural theory, mass culture/popular culture, cultures of resistance, and cultural imperialism. Examples are drawn primarily from the 1960s and its legacy. Emphasis is on responses to the Vietnam War: news coverage, documentaries, scholarship, memoirs and letters, architecture, fiction, poetry, theatre, comics, tv series, and especially popular music (Beatles, Arlo Guthrie, Country Joe, etc.) and Hollywood films (e.g., *Apocalypse Now*, *Coming Home*, *Deer Hunter*, *Full Metal Jacket*, *Platoon*, *Born on the Fourth of July*—if available—and perhaps one Rambo movie.

**491 Mass Culture Revisited: From Popular Literature to the Culture Industry (also Comparative Literature 491 and German Studies 491)**

Fall. 4 credits. For advanced undergraduates and graduate students; taught in English. Reading knowledge of German required.

T 1:25-3:20. P. U. Hohendahl.

This seminar is designed to engage in a critical dialogue with theoretical writings on mass culture (Adorno, Bausinger, C. Bürger, Howe, Huyssen, Jameson, L. Levine, MacDonald, Schenda); and to investigate the emergence of modern mass culture in Germany. Tracing the transition from traditional forms of popular literature to its recasting after the industrial revolution, the course will examine the relationship between established high culture and popular culture. Readings from the works of popular novelists, such as Marlitt, Courths-Mahler, Karl May, and Ganghofer.

**South Asia Program**

N. Uphoff, director; R. Ahmed, R. Barker, R. Colle, E. W. Coward, E. Erickson, S. Feldman, J. W. Gair, A. Gold, D. Gold, D. Holmberg, J. Jasanoff, S. Jasanoff, M. Katzenstein, V. Kayastha, K. A. R. Kennedy, B. Lust, B. G. MacDougall, K. March, F. McCarthy, B. Miller, C. Minkowski, S. Mohanty, A. Nussbaum, S. O'Connor, B. Oja, S. Oja, P. Olpadwala, T. Poleman, D. Sisler, D. Sudan, M. Walter, S. White

The South Asia Program coordinates research, teaching, and special campus events relating to Bangladesh, India, Pakistan, Nepal, and Sri Lanka. The program faculty includes members from a variety of disciplines, including agricultural economics, agricultural engineer-

ing, anthropology, architecture, city and regional planning, communication, comparative religion, ecology and systematics, English, government, history, history of art, human ecology, international agriculture, linguistics, literature, rural sociology, and science, technology, and society. Undergraduates with a special interest in the region may major in Asian studies with a South Asian concentration, or do a South Asian concentration with any other major. The languages regularly offered are Bengali, Hindi, Nepali, Punjabi, Sinhala, Tamil, Urdu, Sanskrit, and Pali. Cornell is a class A member of the American Institute of Indian Studies (AIIS), and undergraduates as well as graduate students are eligible for AIIS intensive language program fellowships in India. For courses available in South Asian studies and details on the major, see the Department of Asian Studies listing in this volume.

Students who want further information on courses and research opportunities should direct questions to the program office, 170 Uris Hall.

**Southeast Asia Program**

R. Barker, director; B. R. Anderson, T. Chaloeintiarana, E. W. Coward, Jr., G. Diffloth, G. S. Fields, M. F. Hatch, H. K. Khanh, A. T. Kirsch, S. J. O'Connor, T. Shiraishi, J. T. Siegel, K. W. Taylor, J. U. Wolff, D. K. Wyatt

Southeast Asia studies at Cornell is included within the framework of the Department of Asian Studies. Fourteen full-time faculty members in the colleges of Arts and Sciences and Agriculture and Life Sciences participate in an interdisciplinary program of teaching and research on the history, culture, and societies of the region stretching from Burma through the Philippines. Courses are offered in such fields as agricultural economics, anthropology, Asian studies, government, history, history of art, linguistics, music, and rural sociology. Instruction is also offered in a wide variety of Southeast Asian languages: Burmese, Cambodian, Cebuano (Bisayan), Indonesian, Javanese, Tagalog, Thai, and Vietnamese, for which Foreign Language Area Studies Fellowships are available. Intensive instruction is offered in the Full-Year Asian Language Concentration (FALCON) in Indonesian at the beginning and intermediate levels. Intensive advanced Indonesian language programs are held from June through August in Indonesia each summer. The formal program of study at Cornell is enriched by a diverse range of extracurricular activities, including an informal weekly luncheon seminar, the concerts of the Gamelan Ensemble, a weekly Southeast Asia film series, and public lectures. The John M. Echols Collection on Southeast Asia, in Olin Library, is the most comprehensive collection on this subject in America.

Undergraduates may major in Asian studies with a focus on Southeast Asia and its languages, or they may elect to take a concentration in Southeast Asia studies by completing 15 credits of course work. Students interested in exploring these opportunities should consult the director, Southeast Asia Program, 120 Uris Hall.

The Southeast Asia Summer Studies Institute (SEASSI), a ten-week intensive language and area program, will be offered from 3 June through 10 August 1991 at Cornell University. A limited number of fellowships are available

for this program. For further information write: Professor John U. Wolff, SEASSI Director, GO2E Uris Hall, Cornell University, Ithaca, New York 14853.

**Statistics Center**

The Cornell Statistics Center coordinates a university-wide program in statistics and probability. Students interested in graduate study in probability and statistics should apply to the Field of Statistics or to one of the other graduate fields of study that offer related course work. A list of courses in probability and statistics recommended for graduate students in the Field of Statistics can be found in the description of the Cornell Center for Statistics in the section "Interdisciplinary Centers and Programs." Further information can be obtained from the director of the Statistics Center in Caldwell Hall.

**Women's Studies Program**

N. Furman, director; L. Abel, J. Allen, D. Bathrick, S. Bem, L. Beneria, J. Bernstock, J. Blackall, J. Brumberg, D. Castillo, A. Cook, I. DeVault, I. Ezergailis, J. Farley, S. Feldman, F. Firebaugh, J. Fortune, G. Fraser, J. Gerner, J. Ginsburg, M. Hite, D. Holmberg, I. Hull, B. J. Isbell, M. Jacobus, J. Locey, S. McConnell-Ginet, K. March, C. A. Martin, S. Mehrez, J. Mueller, H. Mullen, M. B. Norton, S. Samuels, D. Scott, M. Small, L. Waugh, E. Wethington

Women's Studies, a university program in the College of Arts and Sciences, has three goals: to encourage the development of teaching about women and sex roles for women and men; to examine assumptions about women in various disciplines and to develop, systematize, and integrate back into the disciplines new knowledge about women; and to cooperate in public service activities with the extension divisions of the university.

The program is guided by a board composed of faculty, staff, and students at Cornell and members of the Ithaca community who have an intellectual interest in women's studies. Program facilities in Uris Hall, including a reading room-lounge and a seminar room, are open to all interested students and faculty.

**Program Offerings**

Undergraduate students in the College of Arts and Sciences who want to major in women's studies can design their own major through the College Scholar or Independent Major programs. Any graduate student in the university may elect a women's studies minor. Students interested in either the major or the minor should obtain further information from the Women's Studies Office, 332 Uris Hall.

The program typically sponsors a noncredit seminar/study group for graduate students and faculty to facilitate sharing of knowledge across disciplinary lines. During the academic year the program also sponsors frequent public lectures dealing with social, political, and intellectual issues in women's studies.

**The Concentration**

Undergraduate students who wish to graduate with a concentration in women's studies should consult with the director of undergraduate studies in women's studies to select an adviser. In collaboration with that adviser, students will design a coherent program in women's studies to complement their major.



Before graduation, students will submit to their adviser a final summary on their completed work in the program. The concentration is open to students in all colleges of the university.

The concentration in women's studies consists of four courses. Typically, two courses are selected from the list of general courses and two from the list of specialized courses (see below). Freshman writing seminars, related courses, or independent study in women's studies may be substituted for specialized courses in the concentration with the prior approval of the adviser.

For further information or to meet with the director of undergraduate studies to select an adviser, students should contact the Women's Studies Office, 332 Uris Hall, 255-6480.

### Distribution Requirement

Distribution requirements are satisfied by any two women's studies courses in any of the following categories:

*Social sciences:* (a) any two of 208, 218, 238, 244, 277, 305, 321, 353, 363, 366, 406, 408, 425, 428, 450, 454, 480 or (b) any one of 210, 365, plus one from list a.

*History:* any two of 227, 238, 273, 307, 336, 357, 426, 438.

*Humanities:* (a) any two of 248, 251, 264, 281, 297, 348, 349, 363, 365, 366, 390, 402, 404, 445, 456, 460, 474, 475, 476, 481 or (b) any one of 210, 365, 493, plus one from list a.

### Courses

Keeping in mind that women's studies is interdisciplinary, it is useful to distinguish six core areas, or foci, within the program: ideology and culture, institutions and society, history, literature and the arts, psychology and human development, and natural sciences.

The program offers undergraduate and graduate courses in all of the core areas, both independently and in cooperation with other departments. Women's studies courses are grouped into four categories to assist students in selecting the level or degree of specialization suited to their program:

- I) Freshman writing seminars
- II) General courses (which provide a general introduction to a broad subject area or core focus within women's studies)
- III) Specialized courses and seminars (which have smaller enrollments and focus upon more specialized topics within each of the core areas)
- IV) Related courses and seminars (which need not focus exclusively upon women's studies issues but include significant consideration of sex differences, feminist criticism, or gender)

### I. Freshman Writing Seminars

#### 105 Feminine and Masculine Ideals in Japanese Culture (also Asian Studies 105)

Spring. 3 credits.

M W F. 10:10. Staff.

In its long history, Japanese culture has developed a large number of role models—the aristocrat, poet-priest, warrior, entertainer, “salary man,” and “education mama”—and idealized them in its literature and art. Using these ideals as its subject matter, the seminar will give students practice in reading texts

closely, analyzing ideas, and writing various types of papers. Through studying Japanese concepts of femininity and masculinity, the students will not only explore a new culture but will also gain new perspectives on their own cultures.

#### 106 Women and Writing (also English 105)

Fall and spring. 3 credits.

Hours to be arranged. Staff.

What is a woman? How does she confront her personal experience? Does she play a special role in history, in our definition of society, or in our understanding of language and literature? This course will explore the relation between women and writing. We will discuss writings by and about women, debate our attitudes toward feminism, and analyze the relevance of these questions to our own written work. Individual sections will emphasize different aspects of the relation between women and writing. Which section to choose should depend on your own interest in exploring how women appear in private or autobiographical writings, historical contexts, and/or literary works. Further information on specific sections is available in the freshman writing seminar office. Textual overlap among the sections is kept to a minimum so that students can take more than one Women and Writing seminar during their time at Cornell.

#### [107 The Family in American History (also History 107)]

3 credits. Not offered 1990–91.

M. B. Norton.]

### II. General Courses

#### 116 Women and the Biblical World

Fall. 3 credits.

M W F 12:20–1:10. M. Amihai.

A feminist approach to the study of women, their history, and their portrayal in biblical antiquity. Sources include inscriptions, marriage and divorce documents, and literature (goddess mythology, Hebrew Bible, New Testament, Gnostic Gospels). All texts in English translation.

#### 121 Language and Gender (also Linguistics 121)

Fall. 3 credits. Disc/sem, limited to 17 students.

T R 1:25–2:40. Sally McConnell-Ginet.

What does it mean to speak “like a woman” or “like a man,” or “like a girl,” or “like a boy?” Even ten-year-olds in our culture approach similar communicative tasks in gender-differentiated ways: girls often get others to do things by saying things like “let’s get some coat-hangers” whereas their male peers are more likely to say something like “get me a coat hanger.” How do race, social class, age, setting, and aims interact with gender in affecting communicative style? How do our ways of writing and talking reflect and perpetuate gender stereotypes or biases? What is the role of sex and gender in language change? Readings, discussion, and writing assignments will explore connections between our uses of language and the cultural construction of femaleness, maleness, and sexuality.

#### 168.01 Black Women Writers: The Uses of Madness and Silence (also English 168)

Fall. 3 credits. Disc/sem.

Harryette Mullen.

How are silence and madness used in texts by black women writers to explore their relationship to language, writing, and power? Why is madness a compelling metaphor for the complexities of race, class, gender, and cultural conflict? How does one interpret the silences in a text? How is silence itself foregrounded in a literary text? This seminar will focus on these and other questions raised by the novels, short stories, poetry, and drama of black women writers from Africa, the United States, and the Caribbean, including Bessie Head, Toni Morrison, Adrienne Kennedy, Opal Palmer Adisa, Tsitsi Dangaremba, and Jamaica Kincaid.

#### 210 Introduction to Women's Studies

Fall. 4 credits. Limited to 20 students.

Permission of instructor required.

Lec, M 12:20–2:15; disc, W 12:20 or 1:25.

C. A. Martin.

This course introduces students to critical approaches in feminist scholarship to the cultural, socioeconomic, and political situation(s) of women. Particular attention will be paid to the conceptual challenges and dangers posed by attempts to study women without taking account of relations between race, class, and gender in ideological and social formations. Readings will draw on work in various disciplines and will include literary texts and visual images.

#### 214 Biological Basis of Sex Differences (also Biological Sciences 214)

Fall. 3 credits. Prerequisite: one year of introductory biology.

T R 8:30–9:55; plus occasional disc to be arranged.

The structural and functional differences between the sexes are examined. Emphasis is placed on mechanisms of mammalian reproduction. Where possible, special attention is given to studies of humans. Current evidence on the effects of gender on nonreproductive aspects of life (behavior, physical and mental capabilities) is discussed. The course is intended to provide students with a basic knowledge of reproductive endocrinology and with a basis for objective evaluation of sex differences in relation to contemporary life.

#### 218 The Economics of Gender (also City and Regional Planning 218)

Spring. 3 credits.

T R 3:30–5. L. Beneria.

An introduction to economic analysis of gender relations and women's work, with emphasis given to understanding different analytical approaches to these issues. Although the course focuses mostly on the United States, some basic questions regarding international development and women will be dealt with.

**227 Modern American Sex Roles in Historical Perspective (also History 227)**

Spring. 4 credits. Limited to 20 students. Permission required. Intended primarily for sophomores.

M 1:25–3:15. M. B. Norton.

A reading and discussion course. The class will begin by examining sex roles in the United States in the 1990s, looking at a variety of sources like popular magazines and contemporary commentaries. We will then move backwards in time in an attempt to uncover the roots of current attitudes. The students will help to determine which topics the class will investigate in detail.

**[244 Language and the Sexes (also Linguistics 244)]**

4 credits. Not offered 1990–91.

S. McConnell-Ginet.

This course explores connections between language (use) and gender/sex systems, addressing such questions as the following. How do sex and gender affect the ways we speak, the ways we interpret and evaluate speech? How do sociocultural differences in women's and men's roles affect their language use, their relation to language change? What is meant by sexist language? How does conversation structure the social worlds of women and men? Readings draw from work in linguistics, anthropology, philosophy, psychology, literature, and general women's studies and feminist theory.]

**[273 Women in American Society, Past and Present (also History 273)]**

4 credits. Not offered 1990–91.

M. B. Norton.

A survey of women's experiences in America from the seventeenth century to the present. Among the topics to be discussed are women's familial roles, the changing nature of household work, the women's rights movement, employment of women outside the home, and contemporary feminism.]

**277 Psychology of Sex Roles (also Psychology 277 and Sociology 277)**

Spring. 3 credits. Limited to 300 students.

T R 11:40–12:55. S. Bem.

Addresses the question of why and how adult women and men come to differ in their overall life-styles, work and family roles, personality patterns, cognitive abilities, etc. This broad question is examined from five perspectives: (a) the psychoanalytic perspective; (b) the biological perspective; (c) the historical and cultural evolutionary perspective; (d) the child development perspective; and (e) the social-psychological and contemporaneous perspective. Each of these perspectives is also brought to bear on more specialized phenomena relating to the psychology of sex roles, including psychological androgyny, women's conflict over achievement, the male sex role, egalitarian marriage relationships, gender-liberated childrearing, female sexuality, homosexuality, and transsexualism.

**321 Sex and Gender in Cross-Cultural Perspective (also Anthropology 321)**

Fall. 4 credits.

Lec M F 12:20, Disc W 8:00, 9:05, 10:10, 11:15, 12:20, 1:25, 2:30, 3:35. K. S. March.

An introduction to the study of sex roles cross-culturally and to anthropological theories of sex and gender. The course examines various aspects of the place of the sexes in social, political, economic, ideological, and biological systems to emphasize the diversity in gender and sex role definition around the world.

**353 Feminism: State and Public Policy (also Government 353)**

Spring. 4 credits.

T R 2:55–4:10. M. Katzenstein.

The course examines aims and strategies of the feminist movement in the United States and the response of both society and the state to feminist claims. It is thus a course about political protest and the capacity of American political institutions to promote and shape, as well as to counter social change. In examining the law and public policy on such issues as job discrimination, wife battery, rape, abortion, etc., the course explores the contradictions between, and the congruence of, the dual ideals of individual choice and group equality.

**[365 Directions in Feminist Theory (also Government 362)]**

4 credits. Limited to 25 students. Not offered 1990–91.

C. A. Martin.

This course is designed to explore developments in contemporary feminist theory with particular attention to feminist critiques, reinterpretations, and uses of Marxist, psychoanalytic, and (post)structuralist thought. We will be concerned with the ways in which radical feminist questions converge with developments in these fields and the ways in which feminist analyses challenge some of the most basic assumptions embedded in these and other social theories. We will consider the approaches of a variety of feminist thinkers to the relations between a gender, race, class, and sexual divisions.]

**372 Sex Discrimination: Law and Social Policy (also Sociology 372 and Government 306)**

Spring. 4 credits.

M W F 10:10. C. Bohmer.

This course will cover the legal and social trends in the area of sex discrimination. It will examine the relationship between feminist consciousness and developments in gender-related constitutional law. We will discuss the meaning of sex discrimination in the context of various areas of importance and examine the role of the law in redressing or perpetuating social and legal inequities.

**III. Specialized Courses and Seminars**

**[208 Gender, Race, and Medical "Science" (also Africana Studies 208 and Anthropology 208)]**

3 credits. Not offered 1990–91.

G. Fraser.

The course will examine the social construction of race and gender in the medical sciences from the turn of the century to the present. Beginning with readings that propose a new view of scientific medicine as a system of signs and symbols and as culturally embedded, we will proceed to an examination of some of the following topics: racism and experimentation: the treatment of venereal disease and tuberculosis; the demise of social childbirth;

the body as a medical product; menstruation as pathology; the monitored mind: women and psychiatry; the political economy of health care; medical authority; the training of medical students; political anatomy of the body; sites of resistance; and alternative systems: cross-cultural case studies.]

**[238 The Historical Development of Women as Professionals, 1800–Present (also Human Development and Family Studies 258)]**

3 credits. Not offered 1990–91.

J. Brumberg.

The historical evolution of the female professions in America (midwifery, nursing, teaching, librarianship, home economics, and social work) as well as women's struggles to gain access to medicine, law, the clergy, and the academy. Lectures, reading, films, and discussion are geared to identifying the cultural patterns that fostered the conception of gender-specific work and the particular historical circumstances that created these different work opportunities. The evolution of professionalism and the consequences of professionalism for women, family structure, and American society are also discussed.]

**[248 Major Nineteenth-Century Women Novelists (also English 247)]**

4 credits. Not offered 1990–91.

J. Blackall.

This course gives particular attention to the biographical and social circumstances surrounding the novels, their critical reception within their own time, and the themes and subject matter that women novelists elected to write about. The reading includes master-works and certain other works that exerted a major imaginative impact on contemporary readers. Readings are Austen, *Persuasion*; C. Bronte, *Jane Eyre*; E. Bronte, *Wuthering Heights*; Gaskell, *Mary Barton*; Stowe, *Uncle Tom's Cabin*; Eliot, *The Mill on the Floss*; Gilman, *The Yellow Wallpaper*; Chopin, *The Awakening*. In addition, two twentieth-century works, Jean Rhys's *Wide Sargasso Sea* and Edith Wharton's *Ethan Frome*, will be approached as imaginative sequels to *Jane Eyre* and *Wuthering Heights* respectively.]

**[251 Twentieth-Century Women Novelists (also English 251)]**

4 credits. Not offered 1990–91.

S. Samuels.

This course will be particularly concerned with self-consciously experimental novels and with some of the questions about women's experience, perspective, and language raised by recent feminist criticism. We will read works by Virginia Woolf, Jean Rhys, Djuna Barnes, Doris Lessing, Toni Morrison, Margaret Atwood, Alice Walker, and others.]

**[264 Ethnic Literature: Bridges and Boundaries (also English 264)]**

3 credits. Not offered 1990–91.

Harryette Mullen.

The American language that came, as William Carlos Williams noted, "from the mouths of Polish mothers," has also been shaped by the oral and written traditions of Native Americans, African Americans, Chicanos, and Asian Americans whose literary production will be examined in this course. Works by writers in these traditions will be studied as sites marking the emergence of a contemporary American language and literature capable of representing the diverse and particular realities of a multicultural nation. This course will focus

especially on how each ethnic tradition uses the contested territories of geography, language, and gender in texts that both refer to and imaginatively construct communities and traditions based on collective experience. Discussion will focus on how each text makes connections and distinctions between individuals as well as within and among communities bound together by shared linguistic, geographical, spiritual, and cultural traditions, and the territorialization of bodies, especially women's bodies, as boundaries or bridges between races/ethnicities, in discursive constructions of ethnicity.]

**[281 Gender and Society in the Muslim Middle East (also Near Eastern Studies 281)]**

3 credits. Not offered 1990–91.  
L. Peirce.

This course examines conceptions of gender in traditional Muslim society and the ways in which they have affected the experiences of Muslim women. Topics to be covered include the position of women in the religious law of Islam, female seclusion and the harem, social hierarchies and family structure, sexuality, and the problem of Western perceptions of Muslim women. Although attention will be given to gender issues in the contemporary Middle East, the course focuses on the historical roots of the present-day situation of Muslim women. Readings include primary sources in translation; visual materials (slides, movies) form an integral part of the course.]

**[297 Beyond the Stereotype: Images of Women in the Middle East (also Near Eastern Studies 297)]**

Not offered 1990–91.  
S. Mehrez.

We will be reading nonfictional works on women, as well as works of fiction on and by women, in an attempt to re-evaluate certain stereotypic functions and roles ascribed to Middle Eastern women throughout history. Our starting point will be the Koran, the text that continues to regulate the formation of the image of women. We will investigate the degree of acceptance or rejection of such an imposed image as it manifests itself in contemporary texts.]

**[307 African-American Women in Slavery and Freedom (also History 303)]**

Spring. 4 credits.  
TR 11:40–12:55. M. Washington.  
This course thematically explores the history of African-American women from a sociopolitical perspective. Topics include the images and depictions of Black women, how Black women have engaged in political struggle, race progress vs. feminism, the relationship between racism and sexism, and Black women in family life.

**[336 Special Topics in International and Comparative Labor Relations: Comparative History of Women and Work (also ILR 337/537)]**

Fall. 3 credits. Disc/sem.  
W 1:25–4:25. Ileen DeVault.  
This seminar will explore the similarities and differences among different cultures' assumptions about the work of women as well as women's experiences in varying work circumstances throughout history. Beginning with theoretical pieces and overviews of the history of women and work, most of the course will consist across time and geography. Comparative examples will be taken from the United States, Europe, and the Third World.

**[346 German Women Writers in Translation (also German Studies 346)]**

Spring. 4 credits.  
TR 1:25–2:40. C. A. Martin.  
The course will involve careful readings of the work of specific authors, (authors to change each semester); feminist discussion of the concept of "Women's Writing"; and attention to the sociocultural and historical contexts in which the texts under discussion were written. In spring 1991 we will include twentieth-century German and German-Jewish writers and post-war West German writers.

**[348 The Female Literary Tradition: Wollstonecraft to Woolf (also English 348)]**

Spring. 4 credits.  
TR 11:40–12:55. M. Jacobus.  
A course designed to survey and investigate the nature of a British "female literary tradition" from the late eighteenth to the early twentieth centuries, read in the light of the rich and varied feminist criticism it has attracted (questions: what might constitute a female literary tradition? How is it transmitted? Forgotten? Recovered? Defined as "Female" in the first place?) Starting with late eighteenth-century women novelists such as Inchbald, Burney, and Radcliffe, we will move by way of Wollstonecraft's writing to Austen, Edgeworth, and Mary Shelley. Mid-nineteenth-century authors will include writing by the Brontës, Gaskell, Barrett Browning, and George Eliot, as well as sensation novelists such as Braddon and Wood. We will look at some of the "new women" authors of the 1890s (Egerton, Schreiner) before turning to early twentieth-century novelists including Woolf, Radcliffe Hall, and H. D. The dual emphasis will be on an atypical or noncanonical selection of authors and texts, where possible, and on feminist literary criticism; a valuable (although not essential) prerequisite might be a 200- or 300-level course in major women novelists of the period covered, such as Austen, the Brontës, or Eliot, or in feminist literary theory.

**[349 Women in Medieval Literature (also German Studies 348 and Comparative Literature 349)]**

4 credits. Not offered 1990–91.  
B. Buettner.  
A study of women and their roles in the social order as portrayed in the literature of the Middle Ages. Readings will illustrate the range of attitudes toward women from asceticism and antifeminism to their idealization in courtly love lyric and romance. We will examine woman's putative influence in literature, both positive and negative, on man and society and the debates over woman's "proper" attitude and role. Works in English translation will include a play by Hroswitha of Gandersheim, the Nibelungenlied, selected Mariological and mystical poems, courtly love lyric, Parzival, Tristan and Isolde, and The Book of the City of Ladies.]

**[363 Representations of Women in Ancient Greece and Rome (also Classics 363)]**

4 credits. Not offered 1990–91.  
L. S. Abel, J. Ginsburg.  
Classical authors created and left behind powerful images of women and of what women ought and ought not to be. These writers also provide fleeting insights into the real lives of women in antiquity. In this course, we will examine the ancient evidence to trace the origin of some Western attitudes about women and to analyze the assumptions that underlie the representations of women in ancient Greece and Rome. How are these images constructed and how do they work? How can we use the ancient evidence to assess the real lives and social roles of women in antiquity?]

**[366 Lesbian Writing and Theory (also Government 366)]**

Spring. 4 credits. Prerequisite: permission of instructor.  
Hours to be arranged. C. A. Martin.  
This course will begin by investigating the histories and implications of the categories in the course title. Though the focus will change from year to year, there will be a strong emphasis on "lesbian writing" and theory since the late 1960s. We will consider the relations between lesbian and gay male writing and theory as well as theory and writing that addresses itself explicitly to the intersections of race, gender, sexuality, and class. Writers, critics, and theorists will include, but not be limited to Audre Lorde, Esther Newton, Mab Segrest, Barbara Smith, Cherrie Moraga, Gloria Anzaldúa, V. K. Aruna, Adrienne Rich, Teresa de Lauretis, Judith Butler, Diana Fuss, Martha Vicinus, Michael Foucault, Martin Duberman.

**[390 The Fiction of Modern Hispanic Women (also Spanish 390)]**

Taught in Spanish. Not offered 1990–91.  
D. Castillo.  
This course will survey a representative sampler of novels and short stories by twentieth-century Hispanic women. We will be giving particular attention to typical themes and subject matter relating to women's experience and perspectives in the context of questions raised by recent feminist criticism. Readings will include works by Silvina Ocampo, Rosario Ferre, Susana Torres Molina, Carmen Martin Gaité, Carmen Gomez Ojea, Luisa Valenzuela, Cristina Peri Rossi, Mercedes Salisachs, and Albalucia Angel.]

**[404 Women Artists (also History of Art 404)]**

4 credits. Prerequisite: permission of instructor. Auditing not permitted. Not offered 1990–91.  
J. Bernstock.  
This seminar will be devoted to a study of the work of women artists from antiquity to the present. The works of the most important women artists from each period will be studied in relation to the changing roles of women in society and to the art produced contemporaneously by men.]

**406 The Culture of Lives (also Anthropology 406)**

Spring. 4 credits.

K. March.

This seminar explores the insights provided by biographical-autobiographical accounts into both the particularities of individual lives and into the wider social and cultural forms of those lives. We will look at the place of life histories within development of anthropology as a discipline from the earliest explorers' accounts, through the florescence of their importance in early American ethnographic description, and into the contemporary resurgence of interest in personal narratives as windows onto both the social or cultural construction of the person and the personal construction of the social or cultural. Course materials draw heavily upon women's lives and their representations, both to contrast women's and men's accounts and to underscore the special significance of women's narratives in anthropology.

**408 Gender Symbolism (also Anthropology 408)**

Spring. 4 credits.

K. March.

This seminar looks at how cultural meaning is constructed about biological sex differences. We begin from the presumption that sex difference and gender are culturally defined as a system of categories and meanings interacting with people's cognitive, intellectual, and affective experience of their worlds. The seminar has two primary conceptual objectives: (1) to analyze the relations among gender symbols and (2) to explore the relations between these symbols and the social worlds of the people who believe in them.

**425 Gender Relations and Social Transformation (also Rural Sociology 425)**

Fall. 3 credits. Students in the endowed colleges must register for Women's Studies 425. W 7:30–10:30 p.m. S. Feldman.

A comparative analysis of women's contribution to domestic-household and agricultural labor as production practices change. The course emphasizes the configuration of various economic and social sectors and their realignments in and between countries. Changes occur in response to technology transfer, the transformation of the labor market, the international division of labor, and changing family relations.

**[426 Undergraduate Seminar in Early American History (also History 426)]**

4 credits. Not offered 1990–91.

M. B. Norton.]

**[428 Spirit Possession, Shamanism, Curing, and Witchcraft (also Anthropology 428)]**

4 credits. Limited to 20 students. Prerequisite: background in anthropology or women's studies. Not offered 1990–91.

D. Holmberg.

An anthropological consideration of witchcraft, shamanisms, and cults of spirit possession, with special attention to the play of gender. Classic anthropological accounts of non-Western societies will be considered along with ethnographic and historical accounts of Western societies. The course also addresses general problems in the study of women and gender and the anthropology of myth, ritual, and symbolism.]

**431 Contemporary Film Theory (also Theatre 414, English 410, and Society for the Humanities 411)**

Fall. 3 credits.

T 11:10–1:05. C. Penley.

This course will survey the major figures and ideas that have shaped contemporary film theory: Christian Metz's semiotics of the cinema, Raymond Bellour and Thierry Kuntzel's textual analyses of film. Jean-Louis Baudry's "Apparatus" theories, Stephen Heath's work on narrative and ideology, and Laura Mulvey's feminist and psychoanalytic approach to describing spectatorship. In addition the course will cover the most important revisions and refutations of those theories by feminists, Marxists, neo-formalists, deconstructionists, cognitive theorists, cultural studies and popular culture scholars, and so on. Attention will also be given to the social and institutional forces that have shaped this relatively new and volatile discipline.

**[433 The Female Dramatic Tradition (also Theatre Arts 433)]**

4 credits. Not offered 1990–91.

J. E. Gainor.]

**434 Modernity, Femininity, Consumerism (also Society for the Humanities 414 and English 414)**

Spring. 3 credits.

M 12:20–2:15. R. Bowlby.

The tradition of literary modernity is generally seen as opposed to consumerism, whether considered as an exclusive focus on materials and monetary values, or (rather differently) as a feminine capitulation of the lures of a homogeneous mass culture. This course will question the implications and the validity of that dichotomy by looking in detail at representations of the woman, the artist, the consumer culture in literary, theoretical, and popular texts by authors such as Baudelaire, Barthes, Benjamin, Freud, Friedan, Nabokov, Wilde, and Woolf.

**436 Cinema and the Humanism of Commodity (also Society for the Humanities 416 and Theatre Arts 416)**

Spring. 3 credits.

T 12:20–2:15. T. Minh-Ha.

Media production plays a primary role in maintaining a system of depoliticized multicultural diversity, which keeps each marginal group in a definable place as the latter is urged to provide the expected "difference." The seminar will emphasize issues of race and gender in representation, focusing on works that challenge conventional notions of subjectivity, of audience, and of interpretation in relation to film making, film viewing, and the cinematic apparatus. It will discuss the effect of social multiplication of images through which the whole world, in the name of humanism, is gathered within the fold of the known and the visible and becomes appropriable.

**[438 Female Adolescence in Historical Perspective, 1815–1960 (also HDFS 415)]**

3 credits. Limited to 5 students. Permission of instructor required. Not offered 1990–91.

J. Brumberg.

The changing nature of female adolescence in the United States is explored using nineteenth-century primary sources available in the Department of Manuscripts and University Archives. Olin Library multidisciplinary readings and discussions are designed to

uncover the nature of women's childhood, patterns of authority within the family, cultural attitudes toward sexuality, female friendships, courtship patterns, and rites of passage into adulthood.]

**[445 Jane Austen, Elizabeth Gaskell, and George Eliot (also English 445)]**

4 credits. Not offered 1990–91.

J. Blackall.

A close focus on five masterworks of the nineteenth century—Austen's *Pride and Prejudice* and *Emma*; Gaskell's *Life of Charlotte Brontë* and *Wives and Daughters*; and Eliot's *Middlemarch*—with particular regard for the circumstances, biographical and social, from which these works emerged. We will examine these writers' perception of the institution of marriage; their delineation of the problem of attaining self-fulfillment and self-expression within a domestic and rural community, especially for women; and their concepts of a "heroine" and a "hero." Emphasis will be on reading and discussion. Participants will keep journals reflecting their personal responses to the books and their pursuit of chosen topics, these notes leading to one final essay of moderate length.]

**[446 Gothic and Gender (also English 445)]**

4 credit hours. Seminar limited to 20.

Prerequisite: a course at 300 level or above in literature or literary theory. Not offered 1990–91.

M. Jacobus.

A course focusing on the intersections of gothic fiction (by men and women) and gender issues between the late-eighteenth-century and the mid-nineteenth-century sensation novel. The emphasis will be on the gothic construction of gender as well as the definition and evolution of gothic modes and genre and on exploring and (where appropriate) contesting a variety of the psychoanalytic accounts (including gender-political accounts—whether specifically feminist or not). We will be reading some or all of the following novels by Walpole (*Castle of Otranto*), Diderot (*The Nun*), de Sade (*Justine*), and M. G. Lewis (*The Monk*), as well as the feminized (anti-)gothic tradition including Radcliffe (*Mysteries of Udolpho*), Austen (*Northanger Abbey*), Mary Shelley (*Frankenstein*), and Freud's Schreber (*Memoirs of my Nervous Illness*), ending with Wilkie Collins (*The Women in White*). Alongside fiction, we will consider classics of gothic criticism such as Freud's "Uncanny" as well as more recent critical accounts, whether their emphasis is on post-structuralism (Sedgwick's *The Coherence of Gothic Conventions*), feminine fantasy (Modleski's *Loving with Vengeance*), or domestic ideology (Kate Ellis's *The Contested Castle*.)

**450/650 Bio-historical Construction of Gender and Sexuality (also Psychology 450 and 650)**

Fall. 4 credits. Prerequisite: Psychology 277 or permission of instructor. Limited to 12 seniors and graduate students. No preregistration; interested students should attend first class session. Graduate students, see Psychology/Women's Studies 650.

W 2:30–4:30. S. Bem.

This seminar is designed to bridge the divide between biological/essentialist perspectives on gender and sexuality, and historical/social constructionist perspectives. It is interdisciplinary, covering material from biology, history, anthropology, law, sociology, psychology, psychiatry, philosophy, and feminist theory.



Part 1 considers how biology and history have interacted in Western culture to produce both social institutions and discourses that have embedded within them the following three organizing principles or "cultural lenses": (a) biological determinism, (b) androcentrism, and (c) gender polarization (including the stigmatizing of homosexuality). Part 2 considers how the individuals living within such a cultural context are transformed from male or female newborns into "masculine" and "feminine" adults. Part 3 considers possibilities for both social and personal change.

**[454 Women, Revolution, and Socialism (also Asian Studies 454)]**

4 credits. Not offered 1990–91.

Staff.

The course will examine the theory and practice of revolution and socialist development from the viewpoint of women revolutionaries and socialist thinkers as well as male socialist writers on the "Woman Question." The theoretical focus will be on the articulation of revolution in gender relations with other revolutionary struggles against colonial, class, and ethnic domination. Case study material includes the Soviet Union, China, Vietnam, Mozambique, Central America (Nicaragua and Guatemala), and Malaysia. Issues include marriage law reform, land reform and cooperativization, military struggle, political mobilization and leadership, and nonrevolutionary forms of everyday resistance.]

**[456 Edith Wharton, Willa Cather, and Eudora Welty (also English 456/656)]**

Fall. 4 credits.

T R 1:25–2:40. J. F. Blackall.

A representative selection of the best fiction of three distinguished American women writers with particular regard for their representation of women in relation to environment, for their characteristic themes and materials, and for their practice of the craft of fiction. Readings: Wharton, *The House of Mirth*, *Summer*, *The Age of Innocence*, and selected short stories; Cather, *O, Pioneers!*, *A Lost Lady*, *The Professor's House*, and selected short stories; and Welty, *The Robber Bridegroom*, *The Golden Apples*, *The Optimist's Daughter*, and selected short stories. Discussion format with three essays.

**[460 Gender in Nineteenth-Century America (also English 461/661)]**

4 credits. Not offered 1990–91.

S. Samuels.

A study of the relation between historical experience and literary texts. We will examine from the perspectives of both historical and literary analysis the rise of women writers, the novel's preoccupation with conflicts between men and women, the cultural uses of feminism and antifeminism, and the impact of the new woman. Bringing traditional literary texts—novels and poetry—into dialogue with "nonliterary" writings like journalism, political treatise, social reform manifestos, and etiquette books, we will draw on the methods and theories of cultural history and literary criticism to ask how gender relations and the history of women bear on the plots, discourses, and images of literary texts. A tentative reading list would include Susannah Rowson's *Charlotte Temple*, Lydia Maria Child's *The Mother's Book*, Catherine Beecher's *A Treatise on Domesticity*, Nathaniel Hawthorne's *The Blithedale Romance*, works by Angelina and Sarah Grimke, Harriet Beecher Stowe's *Uncle Tom's Cabin*, poems by Emily Dickinson and Walt

Whitman, Louisa May Alcott's *Little Women*, Edith Wharton's *House of Mirth*, William Dean Howells's *A Hazard of New Fortunes*, and Charlotte Perkins's *Gilman's Herland*]

**[474 Black Women Writers (also English 464)]**

4 credits. Not offered 1990–91.]

**[475 Feminist Literary Criticism (also English 475)]**

Spring. 3 credits.

Mary Jacobus.

An introduction to the varieties of feminist literary criticism and theory currently practiced in America, drawing on recent anthologies such as *The New Feminist Criticism* and *Speaking of Gender*, ed. Showalter; *The (M)other Tongue*, ed. Brennan; *Conjuring*, ed. Pryse and Spillers; *French Feminist Thought*, ed. Moi; *Making a Difference*, ed. Greene and Kahn; *The Feminist Reader*, ed. Belsey; *Socialist Feminist Criticism*, ed. Newton. We will explore and question the practice and theoretical assumptions of feminist criticism in the past decade—psychoanalytic, Marxist, linguistic, reader-response, Black and Lesbian, Anglo-American, and Franglo-American. We will be particularly concerned with questions such as: What are the assumptions that underpin the concept of a specifically feminine literary practice or writing (*écriture féminine*)? How do questions of gender enter into interpretation? How is sexual difference constructed (socially, psychically, textually)? How do questions of racial difference and/or sexual preference enter into feminist criticism? Is there a politics of women's writing? What does it mean to invoke a (M)other tongue, and what are the politics of the pervasive maternal and matrilinear metaphors in feminist accounts of literature, literary tradition, and language? Though the main texts will be essays in feminist literary criticism and theory, we will also read a selection of (mainly nineteenth-century and twentieth-century) short works by women authors.

**[476 Women's Poetry (also English 476)]**

4 credits. Limited to 25 students. Prerequisite: permission of instructor. Not offered 1990–91.

D. Mermin.

A historical survey of the female poetic tradition in Britain and America, including such writers as Bradstreet, Dickinson, Bronte, Barrett Browning, Bishop, Brooks, and Plath.]

**[480 Toward an Anthropology of the Female Body (also Anthropology 480)]**

4 credits. Not offered 1990–91.

G. Fraser.

The main purpose of this course is to create a context for the discussion of central issues in the cross-cultural literature on the relationship between the female self, her body-mind, and the wider social order(s). All too easily Western feminists acknowledge but neglect to incorporate into their theoretical framework the perspectives of women from non-Western societies, from different historical periods, and from divergent classes. Do the differences challenge or support our vision of gender as a unifying category? By focusing on women's embodied selves, the hope is that we will begin to develop a critical theory that will reshape the boundaries of our old assumptions.]

**[481 Latin American Women Writers (also Spanish 492 and Comparative Literature 482)]**

Spring. 3 credits. Taught in English.

T R 10:10–11:25. D. Castillo.

This course will provide a sampler of novels and short stories by and about Latin American women. We will look at the question of self-construction and issues such as the social and political concerns involved in a specifically Latin American feminine identity. All works will be read in translation (Romance Studies students should read originals of the two works from the Spanish). Authors may include writers like Luisa Valenzuela (Argentina) and Rigoberta Menchú (Guatemala), Helena Parente Cunha and Clarice Lispector (Brazil), Helena María Viramontes and the Anzaldúa/Moraga anthology *This Bridge Called My Back* (U.S.A.), and Simone Schwarz-Bart (Guadalupe).

**[493 French Feminisms (also French 493)]**

Fall. 4 credits.

T R 1:25–2:40. N. Furman.

This course will examine the political, theoretical, and literary concerns of contemporary French writers who have addressed "la question de la femme/la question du féminin." Readings will include representative texts by Simone de Beauvoir, Monique Wittig, Julia Kristeva, Jacques Lacan, Luce Irigaray, Jacques Derrida, and Hélène Cixous. Taught in English.

**[499 Directed Study]**

Fall or spring. Variable credit. Prerequisites: one course in women's studies and permission of a faculty member of the Women's Studies Program Board.

Hours to be arranged. Staff.

**[613 The Political Economy of Women and Work I (also City and Regional Planning 613)]**

3 credits. Not offered 1990–91.

L. Beneria.

This course deals with the question of how to understand and analyze the economic condition of women, starting with some general issues about the "question of origins," reproduction and production, and the underestimation of women's economic activities. It focuses on different approaches to the analysis of women's work in the household and in the labor market (from an economic and feminist perspective). The empirical material concentrates mostly on the United States with some glances at other industrial countries and the international economy.]

**[614 The Political Economy of Women and Work II (also City and Regional Planning 614)]**

Spring. 3 credits.

W 7–10 p.m. L. Beneria.

A continuation of Women's Studies 613. The focus here is on development issues and on how the development process has affected women in the Third World. The analysis is placed in the context of the global economy, including the connections between the Third World and the more industrialized countries.

**[626 Graduate Seminar in the History, of American Women (also History 626)]**  
Fall. 4 credits. Limited to graduate students. Not offered 1990-91.

T 2:30-4:30. M. B. Norton.

A reading and research seminar intended for graduate students. Major works in American women's history will be carefully scrutinized, and each student will prepare a lengthy research paper.]

**[638 Contemporary German Women Writers (also German Literature 638)]**  
4 credits. Not offered 1990-91.  
I. Ezergailis.]

**[685 Seminar in Sex Differences and Sex Roles (also Psychology 685 and Sociology 685)]**

4 credits. Prerequisite: permission of instructor. Not offered 1990-91.  
S. Bem.]

**[690 German Feminist Criticism and Theory (also German Studies 690)]**

4 credits. Open to qualified undergraduates with permission of instructor. Reading knowledge of German recommended but not required. Not offered 1990-91.

C. A. Martin.

This course is designed to explore developments in feminist literary theory with particular attention to the field of German literature. We will consider competing critical strategies and their political implications by working through different readings of specific literary texts and by raising questions about the implications for feminism of competing critical strategies in the general field of literary theory; the relations between feminism and established critical schools; the tension in feminist Germanistik between critical attention to the "male canon" and the construction of a female literary tradition; the impact on West and East German feminism(s) of their translations of French and American work; the impact and treatment of the Nazi period; the effects of the East-West divide on development in both Germanys; the impact on feminist literature and criticism of Third World women in Germany; and approaches in West and East Germany to imperialism and racism.]

**[692 Hispanic Feminisms (also Romance Studies 690)]**

4 credits. Taught in Spanish. Not offered 1990-91.

D. Castillo.

This seminar is designed to explore the interrelationship of feminist literary theory and the narrative production of the Hispanic world. In this inquiry, we will be developing feminist critical methodologies (based on readings of essays by thinkers such as Barthes, Castellanos, Derrida, Freud, and Glantz) and defining strategies or possibilities for feminist criticism(s). Finally, we will study the ways in which feminist analyses of literature alter our readings of texts by men (Isaacs, Cortazar, Onetti, Garcia Lorca) as well as by women (Pardo Bazan, Tusquets, Valenzuela, Garro), and how they change our conception of criticism and the task of the critic.]

**699 Topics in Women's Studies**

Fall or spring. Variable credits.  
Staff.

Independent reading course for graduate students on topics not covered in regularly scheduled courses. Students develop a course of readings in consultation with a faculty member in the field of Women's Studies who has agreed to supervise the course work.

**[772 Advanced Topics on International Development and Women (also City and Regional Planning 772)]**

4 credits. Not offered 1990-91.

L. Beneria.

A seminar to explore theoretical and empirical issues of interest to master's and Ph.D. degree students working on topics related to gender and international development. The focus will be on a few narrow topics—such as the effect of the foreign debt crisis on women, the formal sector in women's work, and gender aspects in demographic change—to be explored in depth in preparation for research and thesis writing. Students will be encouraged to explore and exchange ideas as well as to provide mutual support and criticism.]

#### IV. Related Courses and Seminars

**[305 Emotion, Cognition, and Culture (also Anthropology 305)]**

4 credits. Not offered 1990-91.

B. J. Isbell.

This course introduces students to the current anthropological perspective on the following topics: (1) cultural shaping of emotion, (2) acquisition and production of gender and sexuality, and (3) cognition and classification in cross-cultural context. It is appropriate for students majoring in anthropology, psychology, cognitive studies, and human development and family studies.]

**[329 Race, Gender, and Politics (also Government 329)]**

4 credits. Open to sophomores and juniors. Limited to 5 students. Not offered 1990-91.

M. Katzenstein.]

**[357 American Families in Historical Perspective (also Sociology 359 and Human Development and Family Studies 359)]**

3 credits. Prerequisite: Human Development and Family Studies 150 or one 200-level social science or history course. Students in endowed units must register for Women's Studies 357 or Sociology 359. Not offered 1990-91.

J. Brumberg.

An introduction to, and overview of, problems and issues in the historical literature on American families and the family life cycle. Reading and lectures will demonstrate the pattern of American family experience in past time, focusing on class, ethnicity, sex, and region as important variables. Analysis of the private world of the family in past time will deal with changing cultural conceptions of sexuality, sex roles, generational relationships, stages of life, and life events. Students will be required to do a major research paper on the history of their family, covering at least two generations and demonstrating their ability to integrate life-course development theory, data drawn from the social sciences, and historical circumstances.]

**[759 Virginia Woolf (also English 759)]**

5 credits. Prerequisite: permission of instructor. Not offered 1990-91.

S. Siegel.]

#### Related Courses in Other Departments

**Gender Issues in Planning and Architecture (City and Regional Planning 415)**

**Time as a Human Resource (Consumer Economics and Housing 411)**

**German Women Writers of the Fin de Siècle (German Studies 754)**

**The Family in Modern Society (Human Development and Family Studies 150)**

**The Family in Cross-cultural Perspective (Human Development and Family Studies 354)**

**Theories of Adult Interpersonal Relationships (Human Development and Family Studies 358)**

**Families and Social Policy (Human Development and Family Studies 456)**

**Contemporary Family Theory and Research (Human Development and Family Studies 650)**

**Women at Work (Industrial and Labor Relations 366)**

**Dress: A Reflection of American Women's Roles (Textiles and Apparel 245)**

#### Writing Program

See "John S. Knight Writing Program," p. 311.

#### FACULTY ROSTER

Abrams, Meyer H., Ph.D., Harvard U. Class of 1916. Professor of English Emeritus, English  
Abruna, Hector D., Ph.D., U. of North Carolina at Chapel Hill. Assoc. Prof., Chemistry  
Adams, Anne, Ph.D., U. of Michigan. Asst. Prof., Africana Studies and Research Center  
Adams, Barry B., Ph.D., U. of North Carolina. Prof., English  
Agawu, V. Kofi, Ph.D., Stanford U. Assoc. Prof., Music  
Ahl, Frederick M., Ph.D., U. of Texas at Austin. Prof., Classics  
Albrecht, Andreas C., Ph.D., U. of Washington. Prof., Chemistry  
Alexander, James P., Ph.D., U. of Chicago. Asst. Prof., Physics/LNS  
Allmendinger, Richard W., Ph.D., Stanford U. Asst. Prof., Geological Sciences/INSTOC#  
Ambegaokar, Vinay, Ph.D., Carnegie Inst. of Technology. Prof., Physics/LASSP\*  
Ammons, Archie R., B.S., Wake Forest Coll. Goldwin Smith Professor of Poetry, English  
Anderson, Benedict R., Ph.D., Cornell U. Aaron L. Binenkorb Professor of International Studies, Government  
Appiah, Anthony, Ph.D., Cambridge U. (England). Prof., Philosophy/Africana Studies and Research Center  
Archer, Richard J., M.A., U. of Missouri at Kansas City. Asst. Prof., Theatre Arts  
Arroyo, Ciriaco M., Ph.D., U. of Munich (Germany). Emerson Hinchliff Professor of Spanish Literature, Romance Studies/Comparative Literature  
Ascher, Robert, Ph.D., U. of California at Los Angeles. Prof., Anthropology  
Ashcroft, Neil W., Ph.D., Cambridge U. (England). Prof., Physics/LASSP\*  
Austin, William W., Ph.D., Harvard U. Given Foundation Professor of Musicology Emeritus, Music  
Babby, Leonard H., Ph.D., Harvard U. Prof., Modern Languages and Linguistics  
Bacharach, Samuel B., Ph.D., U. of Wisconsin. Assoc. Prof. Industrial and Labor Relations/Sociology

- Baird, Barbara, Ph.D., Cornell U. Assoc. Prof., Chemistry
- Banes, Sally, Ph.D., New York U. Assoc. Prof., Theatre Arts
- Barazangi, Muawia, Ph.D., Columbia U. Prof., Geological Sciences/INSTOC\*
- Barbasch, Dan, Ph.D., U. of Illinois. Prof., Mathematics
- Bassett, William A., Ph.D., Columbia U. Prof., Geological Sciences
- Bathrick, David, Ph.D., U. of Chicago. Prof., German Literature and Theatre Arts
- Baugh, Daniel A., Ph.D., Cambridge U. (England). Prof., History
- Beckwith, Steven V. W., Ph.D., California Inst. of Technology. Prof., Astronomy/CRSR†
- Begley, Tadhg P., Ph.D., California Inst. of Technology. Asst. Prof., Chemistry
- Bem, Daryl J., Ph.D., U. of Michigan. Prof., Psychology
- Bem, Sandra L., Ph.D., U. of Michigan. Prof., Psychology/Women's Studies
- Beneria, Lourdes, Ph.D., Columbia U. Prof., City and Regional Planning/Women's Studies
- Bereaud, Jacques, Doctorat d'Univ., U. of Lille (France). Prof., Romance Studies
- Berger, Anne, Ph.D., Paris VII (France). Asst. Prof., Romance Studies
- Berkelman, Karl, Ph.D., Cornell U. Prof., Physics/LNS‡
- Bernal, Martin G., Ph.D., Cambridge U. (England). Prof., Government/Near Eastern Studies
- Bernstock, Judith, Ph.D., Columbia U. Asst. Prof., History of Art
- Berstein, Israel, Candidate in Physico-Mathematical Sciences, Roumanian Academy. Prof., Mathematics
- Bethe, Hans, Ph.D., U. of Munich (Germany). John Wendell Anderson Professor of Physics Emeritus, Physics
- Bilardi, Gianfranco, Ph.D., U. of Illinois. Asst. Prof., Computer Science
- Billera Louis J., Ph.D., City U. of New York. Prof., Mathematics/Operations Research and Industrial Engineering
- Bilson, Malcolm, D.M.A., U. of Illinois. Prof., Music
- Bird, John M., Ph.D., Rensselaer Polytechnic Inst. Prof., Geological Sciences
- Birman, Kenneth P., Ph.D., U. of California at Berkeley. Assoc. Prof., Computer Science
- Bishop, Jonathan P., Ph.D., Harvard U. Prof., English
- Bittman, Dina, Ph.D., U. of Wisconsin at Madison. Asst. Prof., Computer Science
- Blackall, Jean F., Ph.D., Harvard U. Prof., English
- Blass, Elliott M., Ph.D., U. of Virginia. Prof., Psychology
- Bloom, Arthur L., Ph.D., Yale U. Prof., Geological Sciences/INSTOC\*
- Bloom, Bard, Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Computer Science
- Blume, Lawrence E., Ph.D., U. of California at Berkeley. Prof., Economics
- Blumin, Stuart M., Ph.D., U. of Pennsylvania. Prof., History
- Bogel, Fredric V., Ph.D., Yale U. Prof., English
- Bowers, John S., Ph.D., Massachusetts Inst. of Technology. Prof., Modern Languages and Linguistics
- Boyd, Richard N., Ph.D., Massachusetts Inst. of Technology. Prof., Philosophy
- Bramble, James H., Ph.D., U. of Maryland. Prof., Mathematics
- Brann, Ross, Ph.D., New York U. Assoc. Prof., Hebrew and Arabic Literatures (Near Eastern Studies)
- Brazell, Karen W., Ph.D., Columbia U. Prof., Japanese Literature (Asian Studies)
- Breiger, Ronald L., Ph.D., Harvard U. Prof., Sociology
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